Interoperability for Combating the Opioid Epidemic: Lessons Learned From PDMPs

2018 ONC Annual Meeting | Lincoln East
Welcome

• Andrea Jackson, DrPH, MPH
  » Office of the National Coordinator for Health IT, Office of Policy

• Jamie Parker & Sherry Green
  » Carradora Health

• Bryant Karras, MD & Chris Baumgartner
  » Washington State Department of Health

• Jean Hall
  » Kentucky Cabinet for Health and Family Services
ONC PDMP Initiative

Jamie Parker jamie.parker@carradora.com
Sherry Green sgreen586@gmail.com

Carradora Health
PDMP Initiative – Addressing PDMP Challenges

Goal of the Initiative:
Enable integration of PDMP data into the normal clinical workflow by:
• Connecting PDMPs to health IT systems (e.g. EHRs and HIEs) using existing standards.
  » If standards do not exist, establishing standards to facilitate information exchange between PDMPs and health care providers.
  » Improve timely and convenient access to PDMP data for health care providers.

Challenges:
• PDMP data structures are based on NIEM.
• PDMP administrators are unlikely to adopt native EHR or Pharmacy IT system standards due to cost and resource constraints.
  » To solve this the PDMP Implementation Guide mapped:
    – EHR/Health IT adopted standard: NCPDP
    – Pharmacy IT adopted standard: ASAP
• Some states use proprietary products to access PDMP data (Currently, there is no widely adopted standard).
• Fragmented stakeholders require implementation guidance to accommodate multiple policies and scenarios.
• State PDMPs are stand-alone and don’t readily share/may be prohibited from sharing with other states (unless agreements are in place).
Solving the PDMP Challenge At a Glance

1. Sends request to obtain patient history of controlled substances
2. Translates request to a consumable format for the responder
3. Sends request to the State PDMP
4. Sends requested patient history
5. Translates response to a consumable format for the requester
6. Sends requested patient history

EHR/Pharmacy IT System

State PDMP

Hub/Intermediary

PMIX

NCPDP 10.6
ASAP 2.1A
Background

Process to Address the PDMP Challenge

- **Charter** 01/07/2014
- **Use Case** 03/25/2014
- **Implementation Guide** 9/9/2014
  - Consented by the community and ready for pilot testing
- **NCPDP Pilots** January 2015-August 2015
- **ASAP Pilots** September 2015- April 2016
- **Final Implementation Guide** – July 2016
  - Based on pilot feedback
- **Pilot Report Outs and Lessons Learned** – August 2016
- **Initiative Closing Ceremony** – September 2016
PDMP Data Elements

Request Data Elements (used by Rx or EHR System)

- **Request**
  - Requestor
  - Requestor Role
  - Disclosing State
  - Request ID
  - Request Date Time Stamp

- **Requestor Identifier**
  - NPI Number
  - DEA Number
  - State License ID
  - State of License

- **Requesting Facility ID**
  - DEA #
  - NCPE #
  - NPI

- **Requesting Facility**
  - Facility Name
  - State Code of Requesting Facility

- **Patient**
  - First Name
  - Last Name
  - Date of Birth

- **Request Prescription Date Range**
  - Start Date
  - End Date

- **Response Date Time Stamp**

- **Disclosing State**

- **Request ID**

- **Patient**
  - Patient First Name
  - Patient Last Name
  - Patient Date of Birth
  - Patient Street Address
  - Patient State Code
  - Patient Zip Code

- **Prescription**
  - Prescription Filled Date
  - Prescription Written Date
  - Prescription Number
  - Drug
  - Drug Strength
  - Dosage Form
  - Drug Quantity
  - Days Supply
  - Refill

Response Data Elements (State PMP)

- **Drug**
  - Product ID Qualifier
  - Product ID
  - Dispenser Organization Street Address
  - Dispenser Organization City Address
  - Dispenser Organization State Code
  - Dispenser Organization Zip Code

- **Dispenser Organization (Pharmacy Identifier)**
  - DEA #
  - NCPDP #
  - NPI #

- **Prescriber**
  - Prescriber First Name
  - Prescriber Last Name
  - Prescriber Street Address
  - Prescriber City Address
  - Prescriber State Code
  - Prescriber Zip Code

- **Prescriber Identifier**
  - DEA #
  - NPI #
  - State License ID
  - State of License

Optional Data Elements

- **Patient**
  - Patient Gender

- **Patient Identifier (those that apply)**
  - SSN
  - License ID
  - State of License

- **Passport ID**
  - Military ID
  - Tribal ID

- **Prescription**
  - Refill Number
  - Refill Authorization
  - Partial Fill Indicator
  - Method of Payment

- **Dispenser Organization**
  - Dispenser Organization Name (Facility)
  - Dispenser Phone Number
**Background**

**PDMP Data Element Mapping**

Table 6: Field Name Data Element Mapping for a PMIX Request Transaction

<table>
<thead>
<tr>
<th>Data Element</th>
<th>PMIX XML DE Name</th>
<th>NCPDP SCRIPT v10.6 XML DE Name</th>
<th>ASAP Web Services V2.1A XML DE Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requestor</td>
<td><a href="">pmix:Requestor</a></td>
<td>&lt;LastName&gt;</td>
<td>&lt;Requestor&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/pmix:Requestor&gt;</td>
<td>&lt;FirstName&gt;</td>
<td></td>
</tr>
<tr>
<td>Requestor Role</td>
<td><a href="">pmix:RequestorRole</a></td>
<td>&lt;To Qualifier&gt;</td>
<td>&lt;To Qualifier&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/pmix:RequestorRole&gt;</td>
<td>&lt;From Qualifier&gt;</td>
<td>&lt;From Qualifier&gt;</td>
</tr>
</tbody>
</table>

Table 8: Field Name Data Element Mapping for a PMIX Response Transaction

<table>
<thead>
<tr>
<th>Data Element</th>
<th>PMIX XML DE Name</th>
<th>NCPDP SCRIPT v10.6 XML DE Name</th>
<th>ASAP Web Services V2.1A XML DE Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Date/Timestamp</td>
<td><a href="">pmp:ReportExecutionDate</a></td>
<td>&lt;SentTime&gt;</td>
<td>&lt;ResponseDate&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/pmp:ReportExecutionDate&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosing States</td>
<td><a href="">pmix:DisclosingState</a></td>
<td>NA</td>
<td>&lt;DisclosingStates&gt;</td>
</tr>
<tr>
<td></td>
<td>&lt;/pmix:DisclosingState&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request ID</td>
<td>NR\textsuperscript{19}</td>
<td>&lt;RelatesToMessageID&gt;</td>
<td>&lt;RequestID&gt;</td>
</tr>
</tbody>
</table>

For more details and mapping information, please see the [PDMP Implementation Guide](#).
Based on the success of the PDMP pilots it was important to move the results and findings of the pilots to a Standards Development Organization (SDO)

- National Council for Prescription Drug Programs (NCPDP)
  - NCPDP added the identified gap data elements to their standard
    - Requesting Role (renamed Requestor Role)
    - Disclosing State
    - Method of Payment
    - Demographic information (varied by State based on Pilot findings)
  - Additionally NCPDP took on the project of integrating the NCPDP portion of the PDMP IG into the soon to be released NCPDP Implementation Guide
PDMP-EHR Integration Policy Challenges

- How to shape PDMP policies to facilitate effective PDMP-EHR integration
- Access, use and disclosure policies for PDMP data may differ from those for other health data
  - Storage and retention of data
  - Interpretations or presentations of data to end users
  - Type of data collected
  - Authorized users of data
  - Purposes for accessing data
- ONC LPASO Project - closer look at PDMP storage and interpretation laws and rules
- Preliminary findings...
PDMP-EHR Integration Policy Challenges

- 17 states with language that allows placement of PDMP data/report in medical or health record
  - AZ, CA, CO, GA, IN, KY, LA, MA, NH, NJ, OH, OK, TN, TX, VA, WA State, WV
  - Florida proposed rule would allow placement

- 6 states with language that applies access/use/disclosure policies governing medical or health information to PDMP data/report in medical or health record
  - CA, CO, KY, NJ, TN, WA State

- 14 states with language that authorizes PDMP integration or interoperability with health IT systems BUT silent on placement
  - DE, IL, IA, MD, NE, NV, NC, OR, PA, RI, SC, SD, UT, WI
PDMP-EHR Integration Policy Challenges

• No state with language that restricts interpretations of PDMP data or use of interpretations
  ▪ Challenges: undisclosed algorithms for interpretations due to proprietary nature of interpretive tools

• Kentucky and Washington State – leaders in PDMP policy alignment
Connecting and Leveraging PDMP Data

Interventions for the Opioid Crisis

Bryant Thomas Karras, M.D., Chief Informatics Officer | WA State Dept. of Health
Chris Baumgartner, Senior Data Exchange Manager | WA State Dept. of Health
Washington Opioid-related Overdose Deaths, 2000–2017*

Source: DOH Death Certificates (Note: prescription opioid overdoses exclude synthetic opioid overdoses)
*Data for 2017 are preliminary as of 8/23/2018.
PMP Data Collection and Access

- **Dispensers**
  - **Daily Submission (10/1/16)**
  - Collects all Schedules II-V controlled substances
  - Average 12 million records a year
  - *Veterinarians have separate requirements*

- **Pharmacists**
  - ~51% registered

- **State PMP**
  - Reports Sent
  - Data Submitted

- **Prescribers**
  - ~30% w/ DEA license registered

- **Law Enforcement & Licensing**
  - Reports Sent

*Other groups may also receive reports in addition to those listed.*
The Epidemic & Provider Utilization

• Currently only about 40% of prescribers have ever registered to use the PDMP as it is voluntary. We do have a proposed requirement coming this fall.

• Regardless, to adequately address the Rx epidemic we need more use of the system and need it easier to use.

• Because the key issue found when surveying out prescribers as to why they don’t use the PMP:
  – Ease of access
The WA Solution – EHR/HIE/PMP
Interoperability Diagram

HIE Trading Partners (EH/EP) -> Health Information Exchange (Dashed Line) -> Interoperability Engine (Rhapsody) -> Public Health Surveillance Systems

1. Electronic Lab Reporting
2. Cancer Registry
3. Immunization
4. Prescription Review (PMP)
5. Syndromic Surveillance
6. Electronic Case Reporting
7. Newborn Screening

Clinical Data Repository (HCA)
Getting PMP data into Providers’ Record (medication reconciliation)
Integration Status in WA

• As of Nov 5, 2018, approximately 925 locations (based on MU registrations, organization websites) have integrated PMP data into their EHR system through Washington’s HIE.
  – This includes 14 trading partners (21 health systems)

• In addition, eight health systems with approximately 256 locations have initiated testing a connection between their EHR and the HIE.

• Approximately >330 remain in Meaningful Use/Promoting Interoperability registration of intent queue.
PMP & Meaningful Use

Stage 2 & 3 Meaningful Use Approval: WA DOH has approved the PMP as an official “other specialized registry” in compliance with stage 2 & 3 meaningful use

• Listed as an EP & EH Public Health Measure-Specialized Registry
• For MU Registration we do accept group registrations (a health system can register multiple sites at once)
• Professionals had to have an active account with the PMP in order for requests to process (this has changed)
• Onboard with OHP using the NCPDP 10.6 transactions (it should be part of your medication reconciliation module already)

www.doh.wa.gov/healthit
Controlled Substance Prescriptions Dispensed and Queries, Washington PMP

*Estimated
DOH believes use of the HIE is the best option for our State because it:

- Provides a single connection for multiple data sources in addition to PMP data.
- Only requires a single MOU for all data sources
- Charges an annual fee based on organization revenue
  - Many of our trading partners and DOH already pay this fee
- Ensures our confidential healthcare data is maintained in a way that meets state requirements
- Ensures we can offer the PMP as a “specialized registry” option for MU
Quote from End User (benefits of automated HIE query)

• "Just as creating a PMP was a game changer in it's relationship to coordinating the care of our most at risk patients in WA State, pushing that information without provider bias, without burdensome hurdles, now pretty much mandates providers be aware of these patient's special needs and risks. It's the next level that all of the nation can learn from."
“UW Medicine’s integration of PMP data into Epic has made my life as a family physician easier and my patient workload much more efficient. As a waived Buprenorphine prescriber for OUD, who also sees patient with chronic pain on traditional opioids, I use the PMP multiple times every day, and this is so much easier! My MA’s have remarked on how much they like it too. Also as a preceptor of the residents in the UW Family Med Residency I can say it has increased compliance with PMP checks about 10-fold. Thank you!!! “
Funding/Legislation can help... 2016-2017

- High Intensity Drug Traffic Area Funding
- Healthier Washington Medicaid Transformation Section 1115 Substance Use Disorder (SUD) Waiver Implementation Plan
- In 2016 House Bill 2730 passed which allows the WA PMP to register health systems and provider groups if they are participants of the health information exchange
- In 2017 House Bill 1427 passed which:
  - Clarified that healthcare facilities operated by federal agencies and federally-recognized Indian tribes can access Prescription Monitoring Program (PMP).
  - Enhanced the connection in place with the EDIE so that providers involved with care of a patient can be notified of an overdose event.
  - In proposed prescribing rules, PMP checks are required.
Challenges/Lessons Learned

- PMP legislation needing to adapt to changing technology (no HIE, authorizing facilities, etc.)
- Different data transmission standards (use of different standards, translation could leave data unencrypted)
- Avoiding too many data sharing agreements
- Avoiding cost for multiple connections and transaction/provider fees, interstate data
- Ensuring end to end encryption (no PHI stored in hubs)
- Audit trails (tracking requests by facility or end user)
- If you build it, “they” may not necessarily come (MU)
  - Recommend federal continuation of PMP as a specialized registry (Promoting Interoperability)
  - Many facilities have/had competing priorities with MU/PI, ICD-10, etc.
  - The providers love the idea but have to sell it to their administration
Next Steps?


- Encourage other states to consider allowing facility/entity level access

- Connect for interstate data sharing for HIE queries
Reuse of the HIE to PMP Connection
Opioid Prescribing after Non-fatal Overdose

- Study of commercially insured patients with non-fatal overdose between 2000–2012 (n=2848)

- After median follow-up of 299 days:
  - Opioids dispensed to 91% of patients after overdose
  - 7% of patients (n = 212) had repeated opioid overdose

- At 2 years, estimated cumulative incidence of repeat overdose:
  - 17% (95% CI, 14% to 20%) for patients receiving high dosages of opioids after the index overdose
  - 15% (CI, 10% to 21%) for those receiving moderate dosages
  - 9% (CI, 6% to 14%) for those receiving low dosages
  - 8% (CI, 6% to 11%) for those receiving no opioids

Overdose Notification

• Collective Medical’s Emergency Department Information Exchange (EDIE) already receives:
  – Discharge information (overdose)
  – PMP information (prescribers)

• With this additional authority they can now send a notification to prescriber listed on the PMP report or to other PCPs they may have on record.
Emergency Department Information Exchange (EDIE)
Things to Consider for Implementation

- Do we send a notification for fatal and non-fatal overdoses?
- What diagnosis codes do you want to use to trigger a notification (any CS, only Rx, Heroin, Synthetics)?
- Do we wait to send notification until after we get a discharge disposition?
  - Do we send a notification if no discharge disposition is ever provided?
  - Do we send 2 notifications if we get an expired discharge disposition?
- What can we use to send the notification securely (fax, email, direct messaging, EMRs)?
- What timeframe should we use to connect a notification of overdose to a prescriber’s prescription?
Opioid Prescriptions and Drug Overdoses County Data

47.7 million Americans have used illicit drugs or misused Rx drugs.

Prescription opioids can be addictive and dangerous. It only takes a little to lose a lot.

To view similar dashboards at the Accountable Communities of Health (ACH) geographies, click on this link: ACH's information.
Opioid Prescriptions and Drug Overdoses County Data

Patients with High Dose Opioid Prescriptions
Age and sex-adjusted proportion of the population who are high-dose chronic opioid users. A patient with a high-dose chronic opioid prescription is a person who has filled prescriptions for at least 60 days' supply of opioids during the quarter, and whose prescriptions provided a dose of 50 morphine milligram equivalents (MME)/day or more, or 90 MME/day or more, or 120 MME/day or more, averaged over the quarter.***

Map - Time Selector
2016Q4

Table - Dose Selector
50 MME/day

Quarterly Rate per 1000

<table>
<thead>
<tr>
<th>County</th>
<th>2012Q1</th>
<th>2012Q2</th>
<th>2012Q3</th>
<th>2012Q4</th>
<th>2013Q1</th>
<th>2013C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>6.0</td>
<td>7.2</td>
<td>6.6</td>
<td>6.8</td>
<td>7.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Asotin</td>
<td>16.7</td>
<td>15.8</td>
<td>16.8</td>
<td>16.7</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Benton</td>
<td>10.1</td>
<td>10.2</td>
<td>10.2</td>
<td>10.6</td>
<td>11.2</td>
<td>10.8</td>
</tr>
<tr>
<td>Chelan</td>
<td>6.4</td>
<td>6.8</td>
<td>6.8</td>
<td>6.8</td>
<td>6.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Clallam</td>
<td>20.7</td>
<td>19.3</td>
<td>19.2</td>
<td>19.3</td>
<td>18.8</td>
<td>20.6</td>
</tr>
<tr>
<td>Clark</td>
<td>8.0</td>
<td>8.0</td>
<td>7.9</td>
<td>8.0</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Columbia</td>
<td>10.2</td>
<td>10.0</td>
<td>9.7</td>
<td>10.7</td>
<td>11.1</td>
<td>12.0</td>
</tr>
<tr>
<td>Cowlitz</td>
<td>13.7</td>
<td>13.9</td>
<td>13.8</td>
<td>14.1</td>
<td>13.4</td>
<td>13.3</td>
</tr>
<tr>
<td>Douglas</td>
<td>6.7</td>
<td>6.4</td>
<td>6.8</td>
<td>6.3</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Ferry</td>
<td>16.2</td>
<td>15.7</td>
<td>17.0</td>
<td>17.6</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Franklin</td>
<td>7.3</td>
<td>7.3</td>
<td>7.4</td>
<td>8.0</td>
<td>8.3</td>
<td>8.8</td>
</tr>
<tr>
<td>Garfield</td>
<td>13.2</td>
<td>13.1</td>
<td>13.3</td>
<td>14.7</td>
<td>13.6</td>
<td>14.6</td>
</tr>
</tbody>
</table>

© OpenStreetMap contributors

To view similar dashboards at the Accountable Communities of Health (ACH) geographies, click on this link: ACH's Information

Washington State Department of Health
Thank You

Bryant Thomas Karras, M.D.
bryant.karras@doh.wa.gov

Chris Baumgartner
chris.baumgartner@doh.wa.gov
Interoperability for Combating the Opioid Epidemic: Lessons Learned From PDMPs

Kentucky All Schedule Electronic Reporting System (KASPER)

Jean Hall, Integration Project Manager | Kentucky Cabinet for Health and Family Services
KASPER Basics

• Kentucky All Schedule Prescription Electronic Reporting System (KASPER) – Prescription Drug Monitoring Program (PDMP)

• Cabinet for Health and Family Services
  • Business Owner: Office of Inspector General, Drug Enforcement and Professional Practices Branch
  • Technology Provider: Office of Administrative and Technology Services

• Schedules Covered: II – V

• Year Implemented: 1999 (web-based 2005)

• Authorized Users: Prescribers, Pharmacists, Law Enforcement, Medicaid, Licensure Boards, Drug Court Judges
2012 Legislative Session – House Bill 1

- Controlled Substance (CS) administration or dispensing must be reported within one day effective July 1, 2013
  - CS Schedule II through Schedule V*

- Registration mandatory for Kentucky practitioners or pharmacists authorized to prescribe or dispense controlled substances to humans

- Hospitals and long term care facilities can establish “institutional” KASPER accounts to query KASPER on behalf of the prescribers

* Gabapentin became a Schedule V controlled substance in Kentucky on July 1, 2017
House Bill 1 Mandatory Use

• KASPER must be queried by a prescriber:
  • Prior to initial prescribing or dispensing of a Schedule II controlled substance, or a Schedule III controlled substance containing hydrocodone
  • No less than every three months
  • Review data before issuing a new prescription or refills for a Schedule II controlled substance or a Schedule III controlled substance containing hydrocodone
Initiatives Targeting Data Sharing

- Bureau of Justice Assistance - Harold Rogers Grants
- SAMHSA Electronic Health Record and PDMP Data Integration Cohorts (2012 & 2013)
- Centers for Disease Control, Prevention for States (2015)
- Prescription Monitoring Information eXchange Standards Organization
- Office of the National Coordinator Standards & Interoperability Framework Project – Prescription Drug Monitoring Program & HIT Integration Initiative
Integration Approach

• **Use of Standards**
  - National Council for Prescription Drug Programs (NCPDP) Script
  - Health Level 7
  - American Society for Automation in Pharmacy (ASAP)
  - Prescription Monitoring Information eXchange (PMIX) Technical Architecture

• **Use of Existing Infrastructure for Data Exchange**
  - PDMP Interstate Data Sharing Hubs or other intermediaries such as Health Information Exchanges
Sharing PDMP Data

• Interstate
  » State Prescription Drug Monitoring Program (PDMP) system to Other State PDMP system

• Integration
  » EHR/Pharmacy System to PDMP Hub to PDMP
  » EHR/Pharmacy System to HIE/Pharmacy Intermediary to PDMP
  » EHR/Pharmacy System to PDMP directly

• Interstate Integrated
  » Integrated State Electronic Health Record (EHR)/Pharmacy system to Other State PDMP system

• Combined Integration and Interstate Integrated
  » EHR/Pharmacy System has facilities/providers in two states. EHR/Pharmacy system connects to a hub and sends transactions to both states. These transactions would be instate transactions for the state in which a provider resides and interstate for the other state.
Integrated Functionality

• Provider focused integration
  » Pharmacist
  » Prescribers of Controlled Substances
    — Physicians including Podiatrists
    — Advanced Practice RNs
    — Dentists
    — Optometrists

• View only or incorporation into the patient electronic health record
  » Kentucky allows incorporation of the KASPER data. Must be accessible only through the individual patient record
Integrated Functionality

• Integration in User Workflow

  » Pharmacist – Dispensing workflow

  » Prescriber
    – Medication History
    – ePrescribing
    – Ribbon
    – Dynamic Report
    – PDF Report
Opportunities for Integration with Prescription Drug Monitoring Programs

• Appriss PMP Gateway through the National Association of Boards of Pharmacy PMP Interconnect (PMPI) Hub
  » The Kroger Company

• RxCheck Hub
  » Owensboro Health

• Health Information Exchanges
  » Kentucky Health Information Exchange (KHIE)

• Direct Integration to a state PDMP
  » No Direct Integration in Kentucky
Kroger Pharmacies

• 105 Kentucky Kroger Pharmacies connected to KASPER through the PMP Gateway and the PMPI hub

» Kroger connects to an API provided by the PMP Gateway which translates the request from NCPDP to PMIX and sends it to the PMPI hub

• Query KASPER for every CS II through V prescription entered

• Records flagged for Drug Utilization Review process – requires report review
Kroger Pharmacies

- PDMP review is done BEFORE dispensing, reducing the potential to dispense unwarranted CS RXs
Kroger Pharmacies

- Alert to notify pharmacist of data availability
- Must review report if PDMP button is RED
Kroger Pharmacies

- Ad Hoc Requests are also available
“The ability to access prescription drug monitoring information in workflow allows our pharmacists to more easily identify unusually high controlled substance usage and allows them to address overuse or abuse concerns without the need to log into different websites for the information they need in clinical decision making. This immediate access within the pharmacy workflow puts the best information and insights available into the hands of our pharmacists to ensure the safety of our patients and to comply with state regulations.”

Jaime McDermott, R. Ph.
Manager, Pharmacy DEA Compliance
Kroger Health
KASPER Requests by Dispensers

Requests by Dispensers/Dispensers Delegates

- 2017 Kroger Pharmacists:
  - Q1: 557625
  - Q2: 566793

- 2017 Other Pharmacists:
  - Q1: 45984
  - Q2: 44798
KASPER Requests by Dispensers

Requests by Dispensers/Dispensers Delegates

- Q1
- Q2
- Q3
- Q4

2015
2016
2017
Owensboro Health

- Owensboro Health connected to KASPER via the RxCheck hub
  - Owensboro Health’s Epic electronic record sends an NCPDP based request to the locally installed RxCheck client which translates the request to PMIX and sends it to the RxCheck hub
- Epic PDMP Interface build template
- Combination of automatic and manual queries
  - All scheduled visits are automatically queried @ 12:30 am
  - Query on registration for walk ins
  - Manual query for Rx refill or other patient calls
- Displayed in the prescriber Medication History workflow – PDMP Tab
PDMP Review

Medication Dispense History (from 11/16/2017 to 11/8/2018)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Strength</th>
<th>Dispensed</th>
<th>Days Supply</th>
<th>Quantity</th>
<th>Provider</th>
<th>Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gabapentin</td>
<td>300MG</td>
<td>09/15/2018</td>
<td>90</td>
<td>180 Part</td>
<td>Mortensen, Matthew</td>
<td>Walgreens 094412</td>
</tr>
<tr>
<td>Promethazine/Codine</td>
<td>10MG/5ML</td>
<td>09/01/2018</td>
<td>30</td>
<td>90 Part</td>
<td>Aa5555555</td>
<td>Walgreens 00412</td>
</tr>
<tr>
<td>Gabapentin</td>
<td>300MG</td>
<td>08/15/2018</td>
<td>30</td>
<td>90 Part</td>
<td>Mortensen, Matthew</td>
<td>Walgreens 00412</td>
</tr>
<tr>
<td>Gabapentin</td>
<td>300MG</td>
<td>08/01/2018</td>
<td>20</td>
<td>10 Part</td>
<td>Aa5555555</td>
<td>Walgreens 00412</td>
</tr>
</tbody>
</table>

Disclaimer
* The information in this report is based on Schedule II through V controlled substance records reported by dispensers. Data should appear on KASPER reports within two to three business days after dispensing.
* The records listed in the report are based on the patient identification information entered by the report requestor, and if not sufficiently unique may result in the report including records for multiple patients. Please verify the information in the report by contacting the prescribers and/or dispensers listed.
* If the controlled substance records on this report appear to be in error, the patient or provider should contact the dispenser to determine if the information was reported accurately. If the dispenser certifies the information was reported accurately, the dispenser can contact the Drug Enforcement and Professional Practice Branch at 502-564-7985 to investigate the error.
* The information in this report is intended for informational use only by the person authorized to request the report. Intentional disclosure of the report or data to someone not authorized to obtain the data is a Class B Misdemeanor.
* A practitioner or pharmacist may share the report with the patient or person authorized to act on the patient’s behalf and place the report in the patient’s medical record, with the report then being deemed a medical record subject to the same disclosure terms and conditions as an ordinary medical record. (KRS 218A.202)

External Sources and Review Details

<table>
<thead>
<tr>
<th>Source</th>
<th>Last Checked for Updates</th>
<th>Status</th>
<th>Last Reviewed</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKASPER (PB History)</td>
<td>11/8/2018 3:51 PM</td>
<td>History Response Filled</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PDMP Review**

**Medication Dispense History**
No medication dispenses found (since 11/16/2017)

**External Sources and Review Details**

<table>
<thead>
<tr>
<th>Source</th>
<th>Last Checked for Updates</th>
<th>Status</th>
<th>Last Reviewed</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>KASPER</td>
<td>11/9/2018 2:15 AM</td>
<td>No History Available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Successful query for a patient with no KASPER data
Owensboro Health

- Phased Implementation
  - Beta site – Pediatric Clinic
  - All Provider practices and Urgent Treatment Clinics
  - Emergency Departments
  - Inpatients
“In the fight against opioid abuse every second matters, particularly at the point of care when providers have to make healthcare decisions quickly and accurately. The integration of KASPER and Owensboro Health’s record system puts information into the hands of providers almost immediately.”

Secretary Adam Meier
Kentucky Cabinet for Health and Family Services

“We are saving five to ten minutes on each KASPER query. The accuracy of the data is also significant because we now have real time updates rather than old printed reports. As we move forward with several Opioid Crisis initiatives, this helps lay down the foundation for better management of patients and their long term needs. The speed and accuracy of the data helps providers more easily manage this complex problem. Our health system can now truly improve the health of our community.”

Dr. David Danhauer, Chief Medical Information Officer at Owensboro Health
Challenges

• Legality of Integration
  » Users vs. Vendors
  » Institutional Account Agreement for Integration
    – Acute Care Hospitals
    – Long Term Care Facilities
  » Data Use Agreement
    – Pharmacies
    – Provider Practices
    – Affiliated Providers
Challenges

• Management of Agreements
  » Templates
  » Delegation of Signatory Authority

• Agents Data Responsibility throughout the integration process
  » Audit Capability

• Mandatory Use: Requesting a Report vs. Reviewing a Report
Challenges

• Patient Matching
  » EHRs
    – 1 to 1
    – HIPAA Breach protections
  » PDMPs
    – 1 to many
    – Capture Diversion
    – PDMPs not a HIPAA Covered Entity

• Rules Mismatch – NCPDP to PMIX
Lessons Learned

• Test, Test, Test
  » Should be end to end
  » Must involve Subject Matter Experts

• Integration does not work for all requests
  » Patient of record name only
  » Requests requiring manual review deferred
  » KASPER allows request for the mother of an infant being treated for Neonatal Abstinence Syndrome or suspect pre-natal drug exposure

• System messages don’t always match

• Volume and resource growth projections are important

• Some information cannot be shared through integration
Not all dispense history queries completed successfully. There might be information available that was not received.

<table>
<thead>
<tr>
<th>Source</th>
<th>Status</th>
<th>Last Checked for Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISASTER</td>
<td>Multiple Patient Matches</td>
<td>11/9/2018 8:17 AM</td>
</tr>
</tbody>
</table>

**Medication Dispense History**
No medication dispenses found (since 11/16/2017)

**External Sources and Review Details**

<table>
<thead>
<tr>
<th>Source</th>
<th>Last Checked for Updates</th>
<th>Status</th>
<th>Last Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISASTER</td>
<td>11/9/2018 8:17 AM</td>
<td>Multiple Patient Matches</td>
<td></td>
</tr>
</tbody>
</table>
### External Sources and Review Details

<table>
<thead>
<tr>
<th>Source</th>
<th>Last Checked for Updates</th>
<th>Status</th>
<th>Last Reviewed</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKASPER</td>
<td>10/29/2018 10:21 AM</td>
<td>Query Denied</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© 2018 Epic Systems Corporation. Used with permission.
Next Steps - Providing Additional Decision Making Information

- Patient Alerts
  - Naloxone Administration/Distribution*
  - Notification of Non-Fatal Overdose
    - Kentucky mandated reporting of positive toxicology screens for suspected non-fatal drug overdose treated in an Emergency Department
    - Toxicology screen data is submitted to the Kentucky Health Information Exchange
    - KASPER provides a flag if drug information is present for the patient in the Kentucky Health Information Exchange
  - Morphine Milligram Equivalents
    - Inclusion of the Daily Morphine Equivalency Dose (MED) for each drug
    - Flag patients with high Active Cumulative Morphine Equivalent

- Payment Type
- Other non-clinical information
- Informed Data Sharing

*Not collected in KY
Jean Hall
KASPER Integration Project Manager
Cabinet For Health and Family Services

Jean.Hall@ky.gov
502.564.0105 x2499
Thank You & Questions

For slides, please email
Andrea.Jackson@hhs.gov