



CRISP

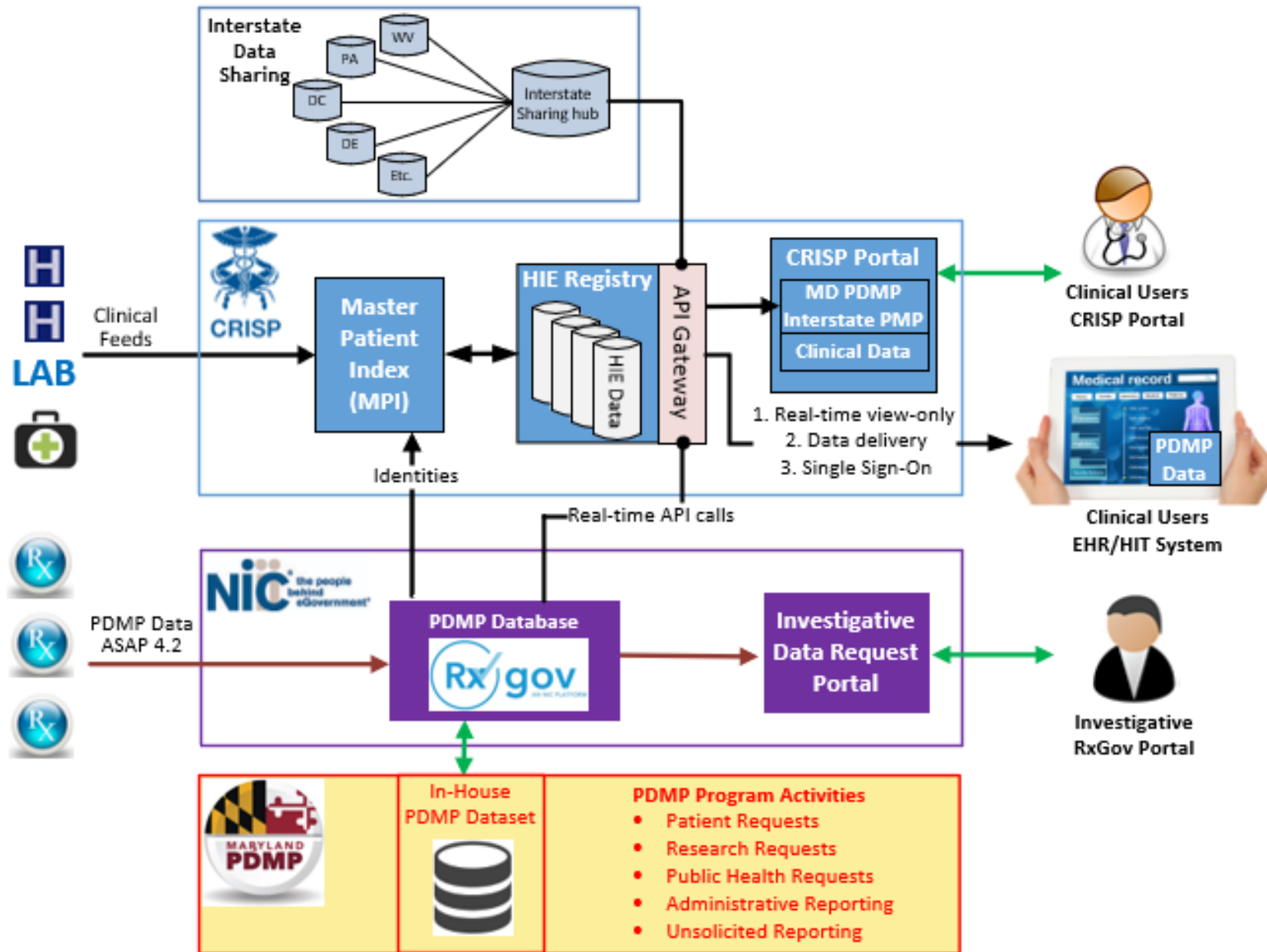
Maryland Perspective

PDMP Patient Matching (and Integration) Challenges & Opportunities

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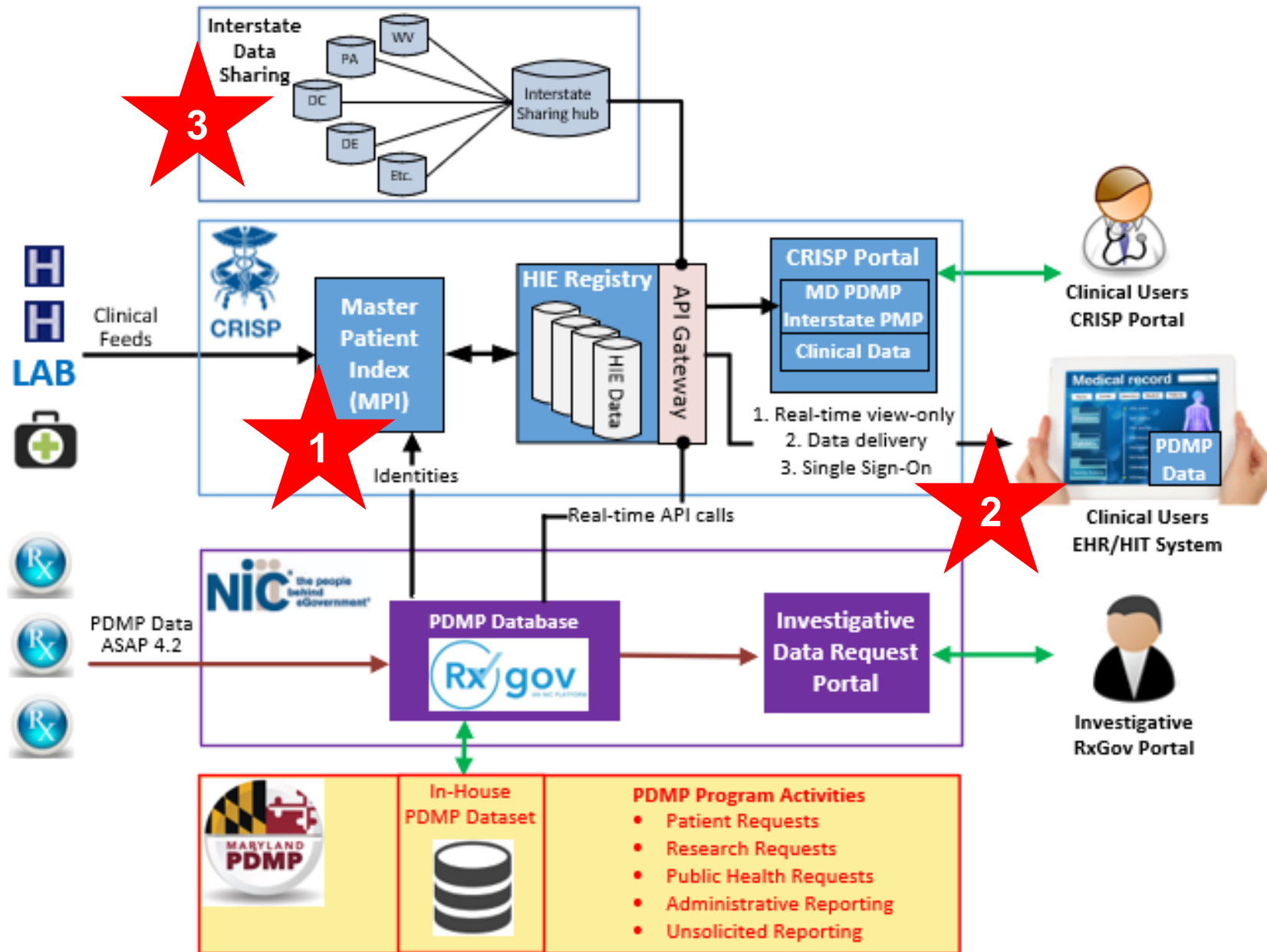


CRISP/PDMP Infrastructure





CRISP/PDMP Infrastructure





1. Patient Matching within MD PDMP

The CRISP Master Patient Index (MPI):

- Performs primary PDMP matching
- Designed to be “smarter” than PDMP vendor matching
- Benefits from other clinical data contributed to HIE
- Uses reference database to resolve “close matches”
- Leveraged to match PDMP data with other datasets

Sample Stats

2015 Dispenses

- Prior Vendor IDs: 3,304,446
- CRISP IDs: 1,859,445

All Dispenses (as of April 2019)

- Current Vendor IDs: 4,798,972
- CRISP IDs:
4,444,425



1. Patient Matching within MD PDMP

Challenges

- Clinical vs. Investigative users rely on different matching algorithms
- Ensuring PDMP requires full set of demographics used by MPI

Opportunities

- PDMP matching improved by:
 - Probabilistic algorithm
 - MPI leveraging non-PDMP data sources
 - Close match resolution with reference datasets
- PDMP data can be matched at patient-level with other datasets for analyses



2. Integration of PDMP into User Workflow

Methods of Integration

SMART on FHIR App

- Epic, Cerner
- No data ingested – real-time call

Data Delivery

- Epic
- Data ingested into patient's chart

•3rd party/custom integration

- Cerner, Meditech, Allscripts, Athena, etc.
- Some ingest data, some real-time calls

Approaches to Patient Query

- MRN-based query (if sending ADTs)
- First name, last name, DOB for user to select from close-matches
- Full demographics for exact match

2. Integration of PDMP into User Workflow

Clinical decision support rule using PDMP data



① Providers are required to review available PDMP data before prescribing opioids or benzodiazepines.

Medication Dispense Information (as of 11/29/2017)

Other	Dispensed	Written	Strength	Form	Quantity	Refills	Days Supply	Provider	Pharmacy
HYDROCODON-ACETAMINOPHEN 5-325	08/27/2017	08/27/2017			10	3	1	SMITH, MARY	HARRY'S INC.
HYDROCODON-ACETAMINOPHEN 5-325	06/12/2017	06/12/2017			30	3	2	LOHR, FREDERICK	HARRY'S INC.
ACETAMINOPHEN-COD #3 TABLET	06/09/2017	06/09/2017			30	3	5	LOHR, FREDERICK	HARRY'S INC.
HYDROCODON-ACETAMINOPHEN 5-325	06/03/2017	06/03/2017			30	3	2	LOHR, FREDERICK	HARRY'S INC.

Disclaimer

Certain information may not be available this report. Please access PDMP data within the CRISP portal for complete information.

Source Information

Source	Last Checked for Updates	Status
CRISP PDMP (Fill History, Acute Care)	11/29/2017 10:07 AM	History Response Filed

[Click to review full PDMP report](#)

[Click to connect to CRISP portal](#)

Dismiss

SMART on FHIR App embedded into EHR



CRISP InContext CRISP Portal

- PDMP 2
- News 2
- Care Alert 2
- Overdose Notification 3
- Prior Visits 3

Show interstate PDMP

Medication: ACETAMINOPHEN-COD #3 TABLET
Pharmacy: CVS Pharmacy
Prescriber: Smith, Jane
Payment: Commercial Insurance

State	Written	Filled	Days Supply	QTY Dis
MD	2017-11-16	2017-11-17	20	10

Medication: PROMETHAZINE VC-CODEINE SYRUP
Pharmacy: Walmart Pharmacy
Prescriber: Jones, Larry
Payment: Medicare

State	Written	Filled	Days Supply	QTY Dis
MD	2017-11-16	2017-11-17	30	25

Feedback Alerts & Notifications Glossary



2. Integration of PDMP into User Workflow

Custom integration – real-time call to MD PDMP

The screenshot displays a medical software interface for a patient named LESLEYREHTE, TEST. The main window shows an 'Inpatient Summary' with various tabs like 'CORES Test', 'Body Systems', and 'Inpatient Workflow'. A pop-up window titled 'Results from MD & DC Hospitals for HIE HIMSSI' is overlaid on the main window. This pop-up contains a table of PDMP (Prescription Drug Monitoring Program) results, which is also shown in a larger, magnified view to the right. The table lists medications, their written and filled dates, supply duration, and prescribing providers. A red arrow points from the 'MORPHINE SULF ER 15 MG TABLET' row in the magnified view back to the main pop-up window.

Medication	Written	Filled	Supply	Prescribing Provider
LORAZEPAM 0.5 MG TABLET	8/28/2014	8/28/2014	30 days	Moffatt, Rohan W
MORPHINE SULF 100 MG/5 ML SOLN	8/28/2014	8/28/2014	15 days	Seay, Dorothy Mee
FENTANYL 100 MCG/HR PATCH	8/28/2014	8/28/2014	20 days	Seay, Dorothy Mee
MORPHINE SULF ER 15 MG TABLET	8/28/2014	8/28/2014	15 days	Howard, Daniel R
CHERATUSSIN AC SYRUP	1/16/2014	1/16/2014	18 days	Wilson, Elizabeth





2. Integration of PDMP into User Workflow

Challenges:

- Policy complexities for ingestion of MD PDMP data
- Variations in vendor capabilities for integration
- User experiences inconsistent based on query approach
- Workflows vary for organizations spanning multiple states

Opportunities:

- Adoption of evolving standards are making integrations easier
- API-based exchange can help resolve user experience issues across regions
- Explore options for “close matches” with integrations



3. Patient Matching/Integration of PDMP Interstate Sharing

- Exact match on name & date of birth

Challenges:

- Risk of false positive patient matches scaling nationally
- Integration of interstate PDMP into workflow difficult
 - Variations in State laws
 - Interstate sharing MOU barriers
- As interoperability improves, performance may be a concern

Opportunities:

- Improved interstate sharing patient matching
 - Centrally via interstate sharing hub
 - Locally in federated model
 - Leverage MPI or national network
 - Incorporate reference databases
- SMART on FHIR apps
 - Real-time sharing without data persisting