



RXCHECK HUB OVERVIEW & ONBOARDING

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RxCheck Presenters

Pat Knue

PDMP TTAC Director

Institute for Intergovernmental Research (IIR)

pknue@iir.com

Jim Giglio

PDMP TTAC Senior Coordinator

Institute for Intergovernmental Research (IIR)

jgiglio@iir.com

Sanjay Ungarala

RxCheck Technical Lead

Tetrus Corporation

sanjay@tetruscorp.com

Raghu Govindaraj

RxCheck Senior Systems Analyst

Tetrus Corporation

raghu@tetruscorp.com

Robert May

RxCheck Program Director

IJIS Institute

robert.may@ijis.org

240-818-3832



Webinar Agenda

I. Overview of the RxCheck Hub

- RxCheck Governance
- Architecture, Standards, and Security
- Roles and Responsibilities
- Integrating
- Administrative Console

II. RxCheck Connection Status and Transactions

III. Frequently Asked Questions

IV. Connecting to RxCheck

V. Q & A



The RxCheck hub

- RxCheck is a fully operational hub that enables states to securely and efficiently share PDMP data.
- The hub was developed in 2011 with support from the BJA, using the Prescription Monitoring Information Exchange (PMIX) National Architecture specifications.
- RxCheck was designed with the involvement of state PDMP administrators, private industry, and the federal government.
- The RxCheck system infrastructure has been tested and validated, and includes the latest design improvements to meet the needs of the state PDMPs.
- RxCheck's state routing service is designed for bi-directional transmission of encrypted PDMP data. It does not collect nor store the data.



RxCheck Governance Board

The purpose of the Governance Board is to:

- Ensure the RxCheck hub efficiently and securely shares prescription data among authorized users;
- Establish the organizational framework for governing the development, support, and utilization of the RxCheck hub;
- Ensure a technology infrastructure to facilitate secure data transmission through the RxCheck hub;
- Maintain an enterprise perspective in the planning and management of IT resources to support RxCheck hub;
- Advance the ability of PDMPs to provide an efficient and comprehensive tool to curtail the abuse and diversion of prescription drugs; and
- Foster and support the use of open standards for the RxCheck hub technology infrastructure and conformance to PMIX National Architecture.



RxCheck Governance Board Members (23 states)

Alabama

Arkansas

California

Colorado

Connecticut

Florida

Illinois

Kentucky

Maine

Maryland

Massachusetts

Nebraska

New York

North Carolina

Oklahoma

Oregon

Pennsylvania

South Dakota

Utah

Vermont

Washington

Wisconsin

Wyoming



RxCheck Governance Board Officers (2019 – 2021)

Chair

Kate Jackson
State of Maryland
kate.jackson@maryland.gov

Vice-Chair

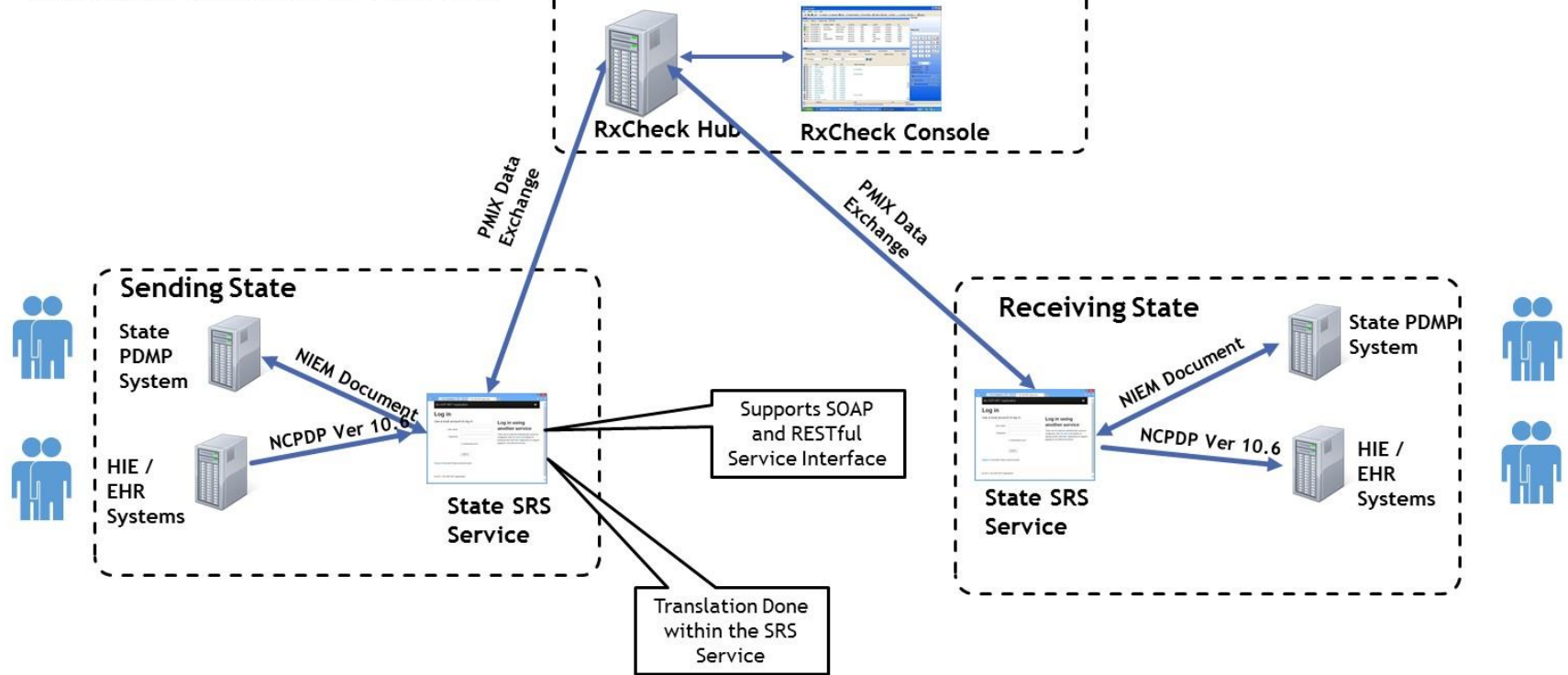
Jared Shinabery
Commonwealth of Pennsylvania
jshinabery@pa.gov

Secretary

Tina Farales
State of California
tina.farales@doj.ca.gov



Technical Architecture for PDMP Hub





RxCheck Hub Capabilities

Version 2.0

- Integration with HIE / EHR
- Auditing: requestor/submitter; date and time
- RxConsole supporting a central PKI database to manage public certificates
- Added security layer to access the SRS configuration by introducing API Key
- Ability for state to create and manage healthcare provider accounts operating within their state
- Notification framework
 - Resetting password onsite
 - Real-time notifications if site is down
- Java-based State Routing Service that can be deployed on multiple platforms
- Translation service built into Outbound SRS to transform NCPDP payload to NIEM



RxCheck Standards Used

- NCPDP Script v10.6
- NIEM
- PMIX
- FHIR 3.0

RxCheck Security



- Hosted on Azure Government Cloud and the infrastructure is CJIS, HIPAA and FedRamp certified.
- All RxCheck servers are Linux servers and Azure infrastructure is configured to detect any intrusions.
- OWASP coding standards are performed on RxCheck Hub source code
- RxCheck is compliant with NIST 800-53.
- All connections undergo conformance testing and certification
- Azure Govt Cloud - infrastructure is disaster proof for business continuity by scaling the application in multiple regions in the country
- Third party Penetration Testing and SOC2 Type 2 audit are currently being implemented



Roles and Responsibilities

IJIS/Tetrus Responsibilities

- IJIS onboards states, provides assistance and oversees technical operation and maintenance of the hub.
- Tetrus provides the State Routing Service (SRS) software with installation instructions and provides technical assistance to support states and health care entities in onboarding and testing.

State Responsibilities

- Provide space for installing the SRS software
- Install the software with help from the IJIS/Tetrus team
- Ensure that the firewall and other rules are configured to enable incoming and outgoing traffic
- Make any modifications required to connect its PDMP system to the SRS software
- Monitor the test to identify and resolve any issues that may arise
- Initially connect to the RxCheck Test Environment to ensure that the end-to-end connection is working correctly
- Monitor the migration to identify and resolve any issues
- Migrate to the RxCheck Production Environment once the end-to-end test is successful



NO FEES are charged by RxCheck

- ✓ **No** connection fees
- ✓ **No** user fees
- ✓ **No** integration fees
- ✓ **No** transaction fees
- ✓ **No** license or recurring fees
- ✓ **No** fees are charged to integrated entities for use



Integrating with RxCheck

- Integrating is simple and becoming easier
- Any health care entity approved by a connected state PDMP can integrate
- RxCheck does not allow direct connections with health care entities

Integration Features

- ✓ Health Entity onboarding with approval workflow
- ✓ RESTFul HTML Endpoint
- ✓ Federated query support for HTML Endpoint
- ✓ Support FHIR standard in SRS
- ✓ Throttle messages coming into PDMP
- ✓ PDMP real-time analytics dashboard



Sample RxCheck HTML Report

RxCheck PMP Report

Print

John Doe

09/15/1950

Report Date : 09/19/2019

Report Time : 09:23 AM

[Status](#)

Patient Demographics

Name	Birth Date	Address	City	State	Zip	Count
John Doe	09/15/1950	123 James Ct	Edison	WI	08817	13

Showing 1 to 1 of 1 entries

Previous 1 Next

Medical Prescription History

Fill Date	Drug	Strength	Qty	Days	Prescriber	Pharmacy	Refill	Payment Mode	State
07/25/2018	Quinidine Gluconate	0	10	5	HOWARD W DAVIS	CHILDREN'S HOSPITAL OF WISCONSIN	5	Self	GG
08/07/2018	Lisdexamfetamine Dimesylate	0	55	2	HOWARD W DAVIS	SHOPKO PHARMACY 604	5	Self	TT
08/23/2018	Methylphenidate	0	50	22	HOWARD W DAVIS	WALGREEN CO.	5	Self	GG
09/05/2018	Dulaglutide	0	15	16	ELLEN N CANOPY	WALGREEN CO.	5	Self	GG
09/15/2018	Methylphenidate HCl	0	70	2	ELLEN N CANOPY	WALGREEN CO.	5	Self	GG
10/29/2018	Pentazocine w/ Naloxone	0	50	19	HOWARD W DAVIS	THE PRESCRIPTION CENTER	5	Self	GG
11/02/2018	Hydromorphone HCl	0	70	11	MADISON CHU	SHOPKO PHARMACY 604	5	Self	TT
11/05/2018	Hydromorphone HCl	0	45	24	MADISON CHU	CUBA CITY HOMETOWN PHARMACY LLC	5	Self	GG

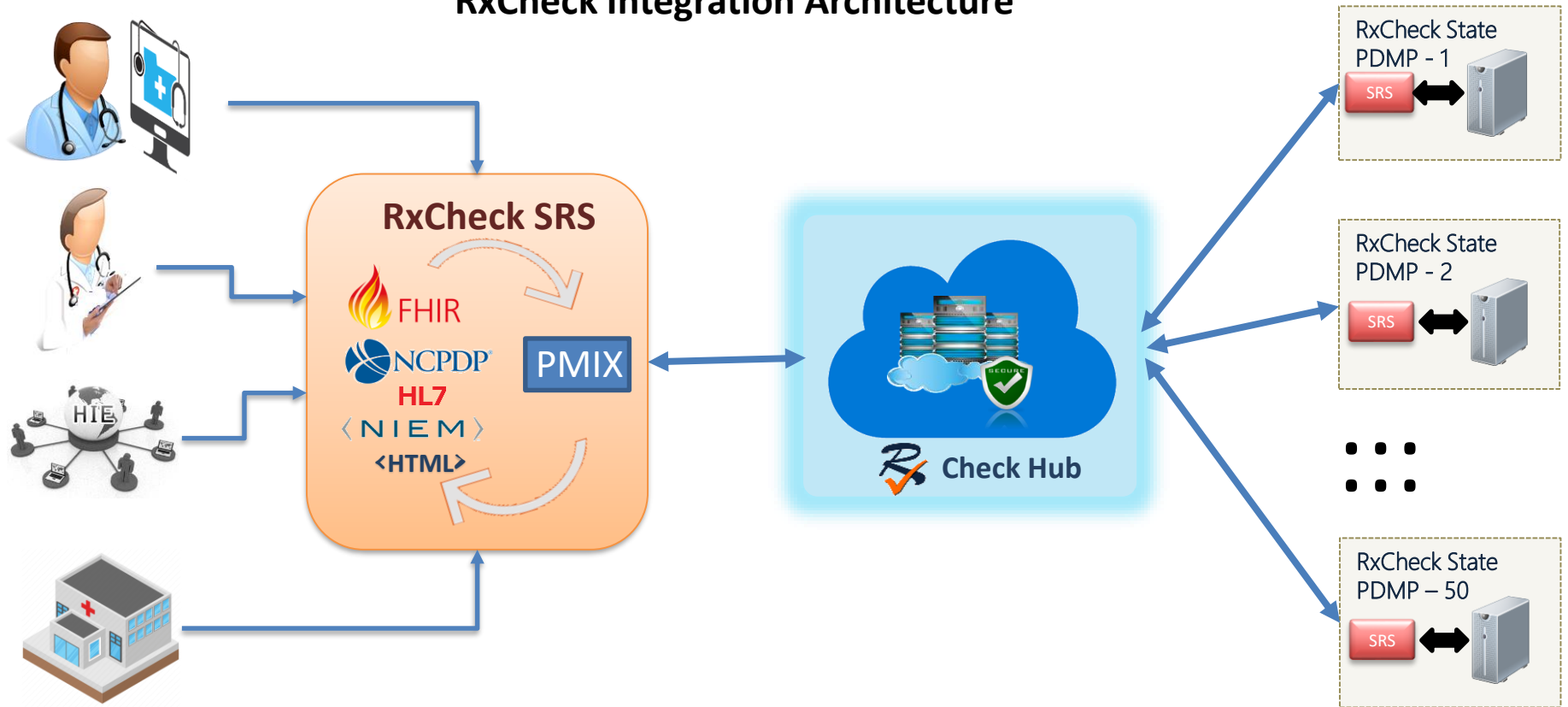
Response Status

PMP	Status
GG	Provided
TT	Provided
KK	NoData

Close



RxCheck Integration Architecture





Creating Health Entity - RxConsole

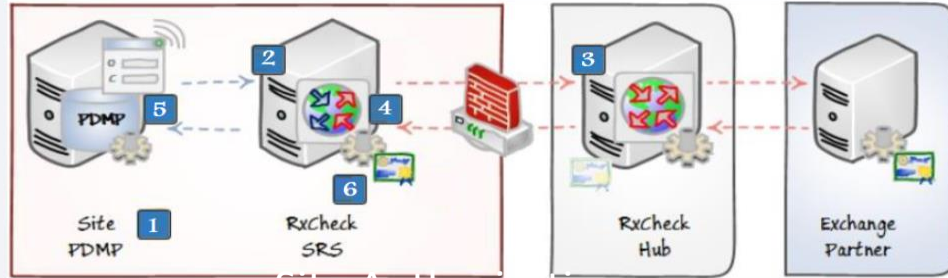
Site ✕

Name*	Site Code*	Site Type*
<input type="text" value="TT EHR"/>	<input type="text" value="TT_EHR"/>	<input style="border: 1px solid #00A0C0;" type="text" value="EHR"/>
Description	Status*	<div style="border: 1px solid #ccc; padding: 5px;"><p>Select Type</p><p style="background-color: #00A0C0; color: white; padding: 2px;">EHR</p><p>EMR</p><p>HIE</p></div>
<input type="text" value="TT EHR"/>	<input checked="" type="radio"/> Active <input type="radio"/> Inactive	

SITE CONFIGURATION



Site Configuration



Site Authorization

Save

+ **1** Site Unique Identifier / Description

+ **2** SRS Outbound Sender Endpoint

+ **3** RxCheck Hub Service Host Endpoint

+ **4** SRS Inbound Sender Endpoint

+ **5** Site PDMP Application Endpoint

+ **6** SRS Certificate

Save

SITE AUTHORIZATION



GG ▾



ungarala@gmail.com
System Admin

Authorized Sites

Save

Available Sites	
LL - LL	
Nevada - NV	
Oklahoma - OK	

Selected Sites	
	Test Site TT - TT
	Test Site RG - RG
	Kentucky - KY
	Illinois - IL
	Test Site KK - KK
	Utah - UT
	Florida - FL
	Washington - WA
	Maryland - MD
	Alabama - AL
	Connecticut - CT
	Wisconsin - WI

Authorized Sub Sites

Available Sub Sites	
test - GG_TES	

Selected Sub Sites	
	Tetrus Health - GG_THL

ROLE AUTHORIZATION FOR SITES



GG ▾















ungarala@gmail.com
System Admin










Authorized roles for sites

Connecticut - CT



Save

Authorized Roles
Advanced Practice RNs 
Physician Assistants 
Dentists 
Optometrists 
Psychologists 
Naturopaths 
Homeopaths 
Veterinarians 
Interns 
Substance Abuse/Mental Health Professional 
Other Non-Prescribers 
Residents 

Selected Roles
 Physicians
 Prescribing Pharmacists
 Other Prescribers
 Pharmacists
 Pharmacy
 Prescriber Delegates - Licensed
 Prescriber Delegates - Unlicensed
 Dispenser Delegates - Licensed
 Dispenser Delegates - Unlicensed

AUDIT EVENT LOGS



sanjay@tetra.com
Super Admin

Event Logs

Site Selector*

All Site Requesting Site Disclosing Site

Site Code*

Test Site TT - TT

Date Range*

07/02/2019 - 07/09/2019

Filter

Export

[More>>>](#)

Id	Request Id	Requesting Site	Disclosing Site	Requestor	Role	Request Datetime	Response Datetime	Response Status
uuid:abb7a919-865f-4441-ba6b-4cf9602b5ec3	123456790	TT	WA	Dr.L Jones	Physicians	07/09/2019 09:02 AM	07/09/2019 09:02 AM	Provided
uuid:82e691b3-d19a-4f82-9c29-211282a9ca8f	123456790	TT	WA	Dr.James Jones	Physicians	07/09/2019 09:01 AM	07/09/2019 09:01 AM	Provided
uuid:03b69bec-68de-40ce-88b4-44d296f21a4b	987987890	TT	KY	Dr. Russell Westbrook	Physicians	07/09/2019 09:00 AM	07/09/2019 09:01 AM	Timed Out
uuid:d41ff9b7-2a98-4184-b722-1c164a9adca0	987987890	TT	KY	Dr. Russell Westbrook	Physicians	07/09/2019 09:00 AM	07/09/2019 09:00 AM	Timed Out
uuid:ebc2071a-7be4-452e-a45a-70a6c475c362	987987889	TT	KY	Dr. Russell Westbrook	Physicians	07/09/2019 08:59 AM	07/09/2019 08:59 AM	Provided
uuid:9b43eed0-4ed3-43bd-a43a-000c9842a1b1	987987999	TT	KY	Dr. Carlos Demetri	Physicians	07/09/2019 08:59 AM	07/09/2019 08:59 AM	Provided
uuid:464d0873-59aa-45e1-b2f5-5a72912ce09b	987987988	TT	KY	Dr. Carlos Cadena	Physicians	07/09/2019 08:58 AM	07/09/2019 08:58 AM	Provided
uuid:6043c59e-d2d4-43fa-870a-472725dd773b	987987988	TT	KY	Dr. James Jones	Physicians	07/09/2019 08:58 AM	07/09/2019 08:58 AM	Provided
uuid:bfd88ff-16b7-4b13-a3e8-3fd978bcb065	987987988	TT	KY	Dr. Mark Smith	Physicians	07/09/2019 08:58 AM	07/09/2019 08:58 AM	Provided
uuid:971bdac1-9145-4d02-aec3-f423c914caa4	987987988	TT	KY	Dr. James Jones	Physicians	07/09/2019 08:58 AM	07/09/2019 08:58 AM	Provided

PDMP MAINTENANCE



-
-
-
-
-
-

List of Maintenance

+ Add Maintenance

No records found

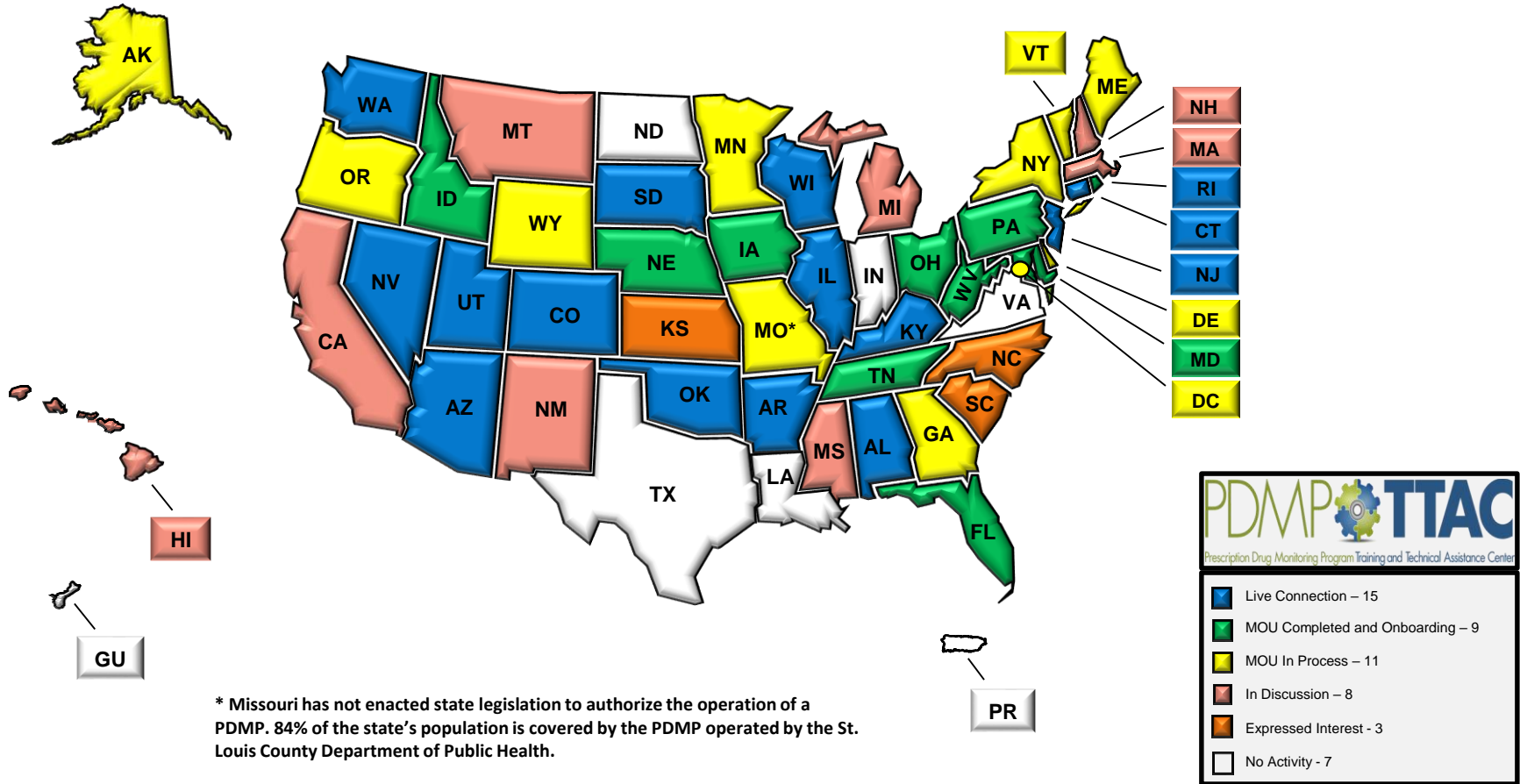
Maintenance ✕

From Datetime* **To Datetime*** **Reason Type***

**Date Time is EST Timezone

Reason Message*

Interstate Data Sharing Status via RxCheck Hub





CONNECTED STATES

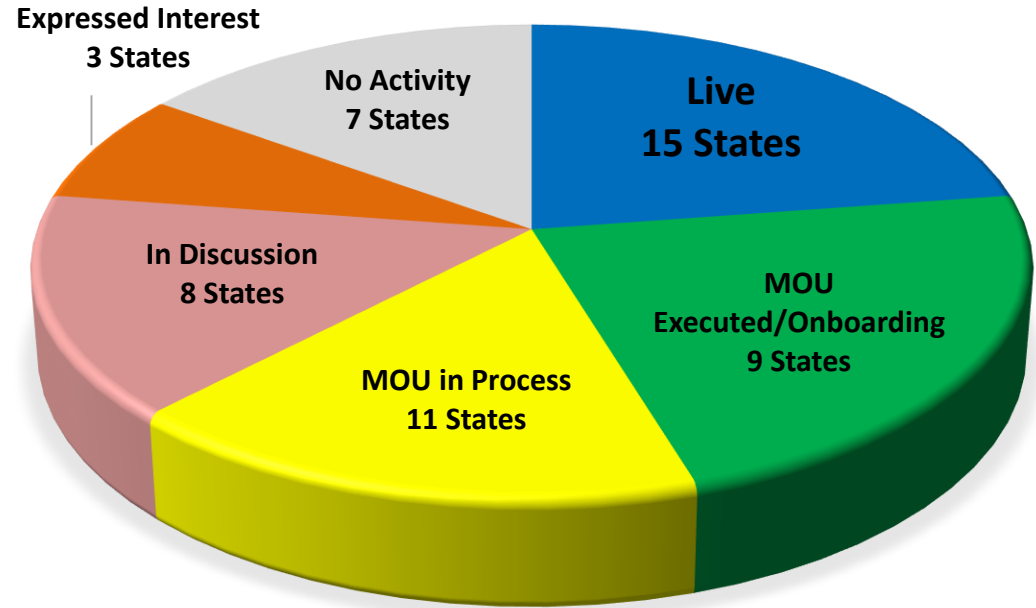
2018 (3 STATES)

2019 (12 STATES)

1. Illinois
2. Kentucky
3. Utah
4. Washington
5. Nevada
6. Connecticut
7. Wisconsin
8. Arkansas
9. South Dakota
10. New Jersey
11. Colorado
12. Alabama
13. Arizona
14. Oklahoma
15. Rhode Island



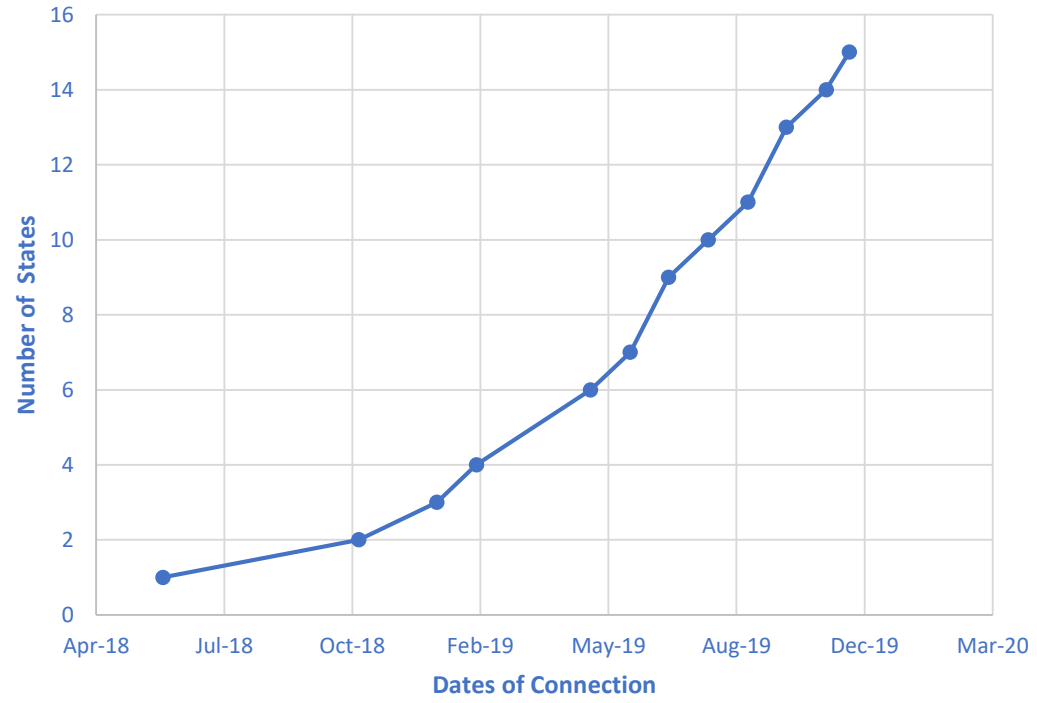
RxCHECK ONBOARDING STATUS





RXCHECK STATE CONNECTION TREND

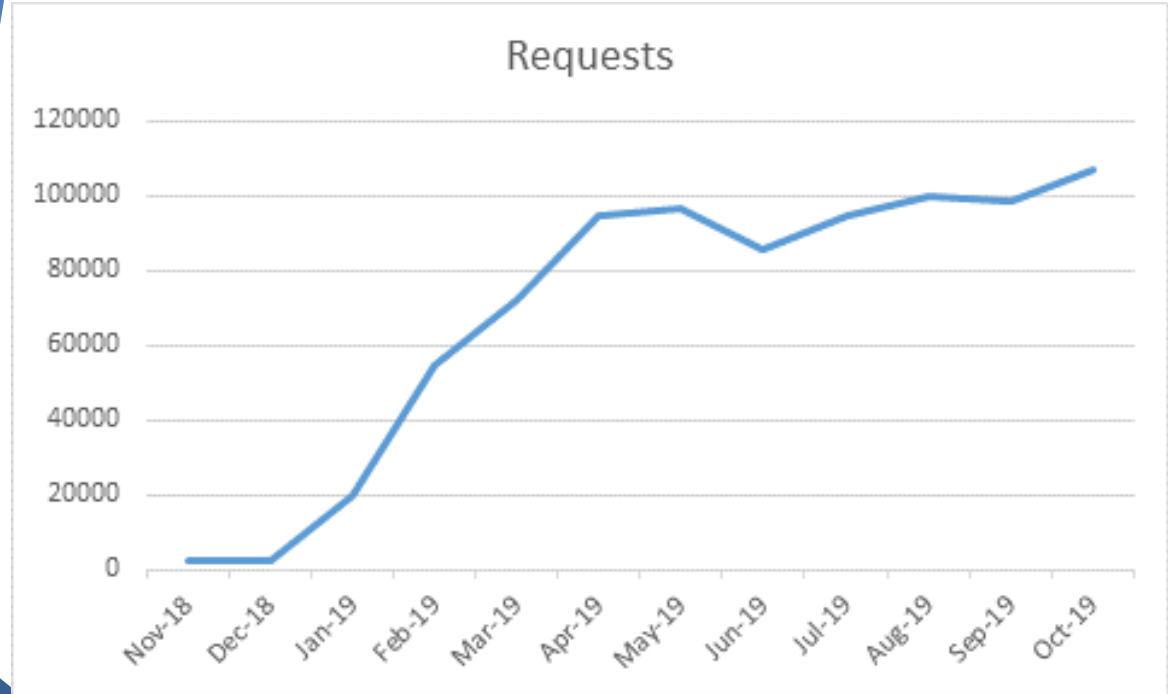
Trend in States Connected





KENTUCKY INTEGRATION TRANSACTIONS

OWENSBORO HEALTH





RXCHECK TRANSACTIONS

- **THERE IS NO CORRELATION BETWEEN VOLUME OF TRANSACTIONS AND THE CAPACITY OF THE RXCHECK HUB**
- **RXCHECK IS SCALABLE TO BE ABLE TO HANDLE ANY VOLUME**



INTEGRATION CHALLENGES

- **Affordability**
 - Initial costs for integration can be prohibitive to some health entities.
 - Vendor user fees or transaction fees
- **Limited options/functionality**
 - Partners were looking for solutions that offered options such as the ability to print reports or import into their Electronic Health Record – something not permitted in some states.
- **Vendor resistance to work with state specific requirements.**
- **Ability to receive audit data at the user level**



OBSTACLES TO GROWTH

MYTH:
SYSTEM CAPACITY
INHIBITS
RXCHECK GROWTH

***System capacity is not an obstacle to growth.
RxCheck is scalable to be able to handle increased
volume as needed.***

True Obstacles to growth:

- The costs vendors are charging states for using RxCheck and for RxCheck Integration activity.

Cost Models

- Transaction fees charged to providers by month/year
- Fees based on the number of integration transactions
- Annual fee for maintaining the integration connection



Frequently Asked Questions

What do I need to do to be in compliance with the PDMP data sharing system special condition in CDC or BJA grants?

- Each state is allowed to exercise their choice for their primary hub, however, to be considered live in RxCheck, a state must successfully query another state and respond to a query by another state in Production.
- To comply with the special conditions, if a state receives a request from another state via the RxCheck Hub, the receiving state must use RxCheck to send back the requested information.

How does the CDC or BJA get notified?

- The IJIS Institute will notify BJA or the CDC by email that a connecting state has met the special condition by demonstrating that they are able to respond to requests for interstate data sharing. The state PDMP administrator will be copied so they have written proof that the funding agency has been notified.



Frequently Asked Questions

What level of load testing has been done on RxCheck? Any idea of the volume it is capable of handling?

The current RxCheck Hub version has been verified to support 120 transactions per second, with response latency of 2 seconds from PDMP application.

How does my state control which states can request its data or with which it shares data?

RxConsole provides authorized state administrators with the ability to control which states and which roles can request data.



Frequently Asked Questions

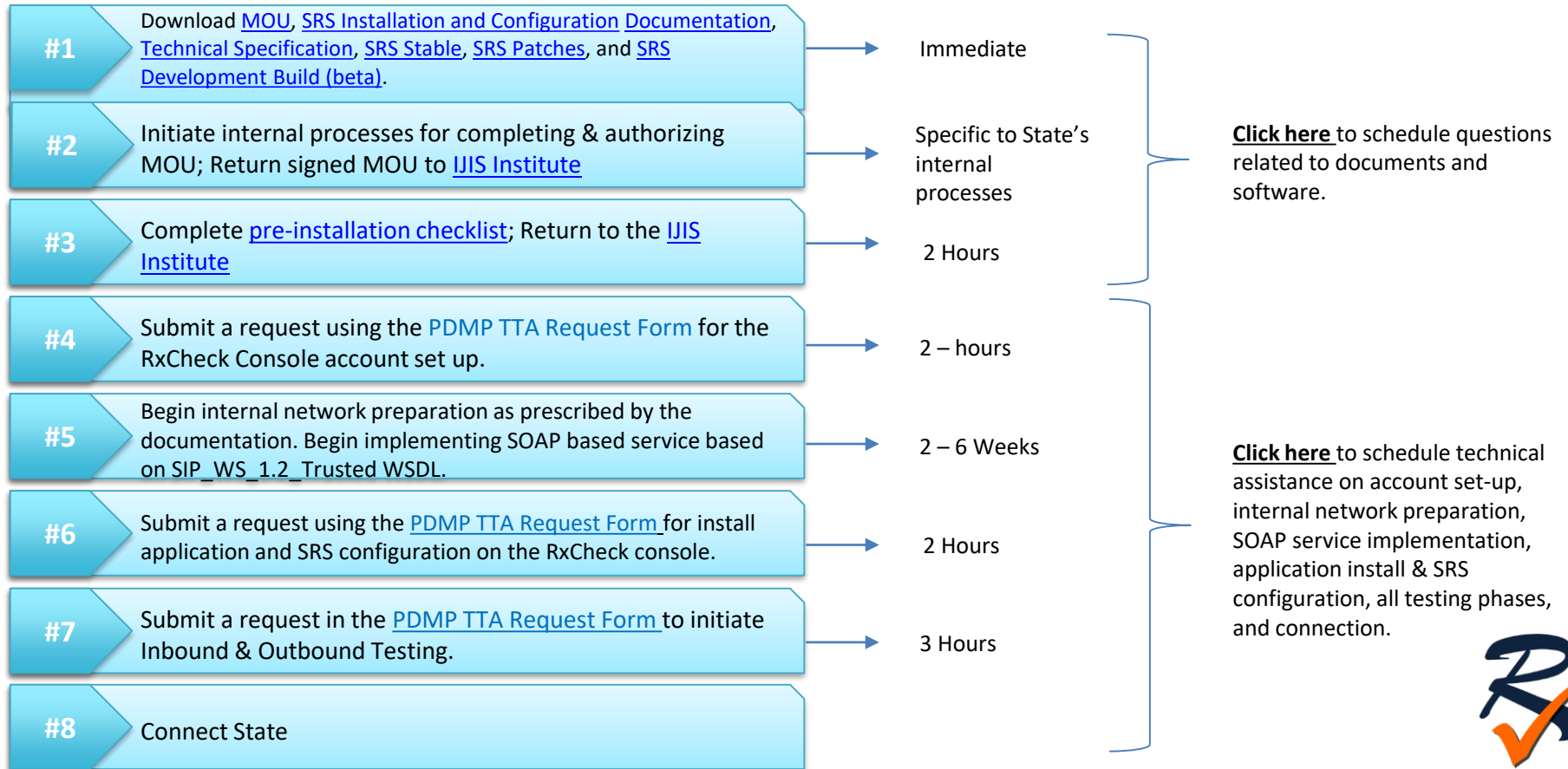
Does the RxCheck hub, DOJ, CDC or the IJIS Institute have access to my state's data?

- The RxCheck hub, DOJ, CDC, or IJIS Institute **does not** have access to your state's data.
- Each state maintains ownership and complete control over access to its PDMP data at each step of the process.
- Data is encrypted using x509 digital certificates and the message is encrypted at the source network before it is submitted to the RxCheck hub. Only the receiving PDMP can decrypt the message.



MILESTONES FOR CONNECTION

TIME TO COMPLETE





How do I start?

A website has been stood up to serve as your “one stop shop” to support connecting to the RxCheck hub.

The URL is: <https://coapresources.org/pdmp/RxCheck>

On the site you can:

- Access all the **FAQs**
- Access all **documents and technical specifications** needed to connect
- Schedule and attend **webinars or access recordings of webinars**
- Reserve ‘office hours’
- Schedule time to **speak with the IJIS** staff one-on-one
- Request technical assistance



Questions

Email: pdmpttac@iir.com
Telephone: (781) 609-7741
Website: www.pdmpassist.org