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
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

**John Doe**  
09/15/1950

**Patient Demographics**

<table>
<thead>
<tr>
<th>Name</th>
<th>Birth Date</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Doe</td>
<td>09/15/1950</td>
<td>123 James Ct</td>
<td>Edison</td>
<td>WI</td>
<td>08817</td>
<td>13</td>
</tr>
</tbody>
</table>

Showing 1 to 1 of 1 entries

### Medical Prescription History

<table>
<thead>
<tr>
<th>Date</th>
<th>Drug</th>
<th>Strength</th>
<th>Qty</th>
<th>Days</th>
<th>Prescriber</th>
<th>Pharmacy</th>
<th>Refill</th>
<th>Payment Mode</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/25/2018</td>
<td>Quinidine Gluconate</td>
<td>0</td>
<td>10</td>
<td>5</td>
<td>HOWARD W DAVIS</td>
<td>CHILDREN'S HOSPITAL OF WISCONSIN</td>
<td>5</td>
<td>Self</td>
<td>GG</td>
</tr>
<tr>
<td>08/07/2018</td>
<td>Lisdexamfetamine Dimeylate</td>
<td>0</td>
<td>55</td>
<td>2</td>
<td>HOWARD W DAVIS</td>
<td>SHOPKO PHARMACY 604</td>
<td>5</td>
<td>Self</td>
<td>TT</td>
</tr>
<tr>
<td>08/25/2018</td>
<td>Methylphenidate</td>
<td>0</td>
<td>50</td>
<td>2</td>
<td>HOWARD W DAVIS</td>
<td>WALGREEN CO.</td>
<td>5</td>
<td>Self</td>
<td>GG</td>
</tr>
<tr>
<td>09/05/2018</td>
<td>Duloxetine</td>
<td>0</td>
<td>15</td>
<td>16</td>
<td>ELLEN N CANOPY</td>
<td>WALGREEN CO.</td>
<td>5</td>
<td>Self</td>
<td>GG</td>
</tr>
<tr>
<td>09/15/2018</td>
<td>Methylphenidate HCl</td>
<td>0</td>
<td>70</td>
<td>2</td>
<td>ELLEN N CANOPY</td>
<td>WALGREEN CO.</td>
<td>5</td>
<td>Self</td>
<td>GG</td>
</tr>
<tr>
<td>10/29/2018</td>
<td>Pentecocine w/ Naltrexone</td>
<td>0</td>
<td>50</td>
<td>19</td>
<td>HOWARD W DAVIS</td>
<td>THE PRESCRIPTION CENTER</td>
<td>5</td>
<td>Self</td>
<td>GG</td>
</tr>
<tr>
<td>11/02/2018</td>
<td>Hydromorphone HCl</td>
<td>0</td>
<td>70</td>
<td>11</td>
<td>MADISON CHU</td>
<td>SHOPKO PHARMACY 604</td>
<td>5</td>
<td>Self</td>
<td>TT</td>
</tr>
<tr>
<td>11/05/2018</td>
<td>Hydromorphone HCl</td>
<td>0</td>
<td>45</td>
<td>24</td>
<td>MADISON CHU</td>
<td>CURA CITY HOMETOWN PHARMACY LLC</td>
<td>5</td>
<td>Self</td>
<td>GG</td>
</tr>
</tbody>
</table>

### Response Status

<table>
<thead>
<tr>
<th>PMP</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>GG</td>
<td>Provided</td>
</tr>
<tr>
<td>TT</td>
<td>Provided</td>
</tr>
<tr>
<td>KX</td>
<td>NoData</td>
</tr>
</tbody>
</table>

[Close]
Creating Health Entity - RxConsole

- Name: TT EHR
- Site Code: TT_EHR
- Site Type: EHR

Status: Active
Site Configuration

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
### Authorized Sites

<table>
<thead>
<tr>
<th>Available Sites</th>
<th>Selected Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL - LL</td>
<td>Test Site TT - TT</td>
</tr>
<tr>
<td>Nevada - NV</td>
<td>Test Site RG - RG</td>
</tr>
<tr>
<td>Oklahoma - OK</td>
<td>Kentucky - KY</td>
</tr>
</tbody>
</table>

### Authorized Sub Sites

<table>
<thead>
<tr>
<th>Available Sub Sites</th>
<th>Selected Sub Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>test - GG_TES</td>
<td>Tetrus Health - GG_THL</td>
</tr>
</tbody>
</table>
### Authorized roles for sites

#### Connecticut - CT

<table>
<thead>
<tr>
<th>Authorized Roles</th>
<th>Selected Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Practice RNs</td>
<td>Physicians</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>Prescribing Pharmacists</td>
</tr>
<tr>
<td>Dentists</td>
<td>Other Prescribers</td>
</tr>
<tr>
<td>Optometrists</td>
<td>Pharmacists</td>
</tr>
<tr>
<td>Psychologists</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Naturopaths</td>
<td>Prescriber Delegates - Licensed</td>
</tr>
<tr>
<td>Homeopaths</td>
<td>Prescriber Delegates - Unlicensed</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>Dispenser Delegates - Licensed</td>
</tr>
<tr>
<td>Interns</td>
<td>Dispenser Delegates - Unlicensed</td>
</tr>
<tr>
<td>Substance Abuse/Mental Health Prof.</td>
<td></td>
</tr>
<tr>
<td>Other Non-Prescribers</td>
<td></td>
</tr>
<tr>
<td>Residents</td>
<td></td>
</tr>
<tr>
<td>Id</td>
<td>Request Id</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>123456790</td>
<td>TT</td>
</tr>
<tr>
<td>987987890</td>
<td>TT</td>
</tr>
<tr>
<td>987987899</td>
<td>TT</td>
</tr>
<tr>
<td>9879878987</td>
<td>TY</td>
</tr>
<tr>
<td>9879878988</td>
<td>TT</td>
</tr>
<tr>
<td>9879878989</td>
<td>TT</td>
</tr>
<tr>
<td>9879878988</td>
<td>KY</td>
</tr>
<tr>
<td>9879878988</td>
<td>KY</td>
</tr>
</tbody>
</table>
* Missouri has not enacted state legislation to authorize the operation of a PDMP. 84% of the state’s population is covered by the PDMP operated by the St. Louis County Department of Public Health.
CONNECTED STATES

2018 (3 STATES)
1. Illinois
2. Kentucky
3. Utah

2019 (12 STATES)
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

- Live: 15 States
- MOU Executed/Onboarding: 9 States
- MOU in Process: 11 States
- In Discussion: 8 States
- Expressed Interest: 3 States
- No Activity: 7 States

15 States
9 States
11 States
8 States
3 States
7 States
RXCHECK STATE CONNECTION TREND

Trend in States Connected

Number of States

Dates of Connection

• 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
• 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
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
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

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Download <strong>MOU, SRS Installation and Configuration Documentation, Technical Specification, SRS Stable, SRS Patches, and SRS Development Build (beta)</strong>.</td>
</tr>
<tr>
<td>#2</td>
<td>Initiate internal processes for completing &amp; authorizing MOU; Return signed MOU to <strong>IJIS Institute</strong>.</td>
</tr>
<tr>
<td>#3</td>
<td>Complete <a href="#">pre-installation checklist</a>; Return to the <strong>IJIS Institute</strong>.</td>
</tr>
<tr>
<td>#4</td>
<td>Submit a request using the <strong>PDMP TTA Request Form</strong> for the RxCheck Console account set up.</td>
</tr>
<tr>
<td>#5</td>
<td>Begin internal network preparation as prescribed by the documentation. Begin implementing SOAP based service based on <strong>SIP_WS_1.2_Trusted WSDL</strong>.</td>
</tr>
<tr>
<td>#6</td>
<td>Submit a request using the <strong>PDMP TTA Request Form</strong> for install application and SRS configuration on the RxCheck console.</td>
</tr>
<tr>
<td>#7</td>
<td>Submit a request in the <strong>PDMP TTA Request Form</strong> to initiate Inbound &amp; Outbound Testing.</td>
</tr>
<tr>
<td>#8</td>
<td>Connect State</td>
</tr>
</tbody>
</table>

# TIME TO COMPLETE

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Time to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Immediate</td>
</tr>
<tr>
<td>#2</td>
<td>Specific to State’s internal processes</td>
</tr>
<tr>
<td>#3</td>
<td>2 Hours</td>
</tr>
<tr>
<td>#4</td>
<td>2 – hours</td>
</tr>
<tr>
<td>#5</td>
<td>2 – 6 Weeks</td>
</tr>
<tr>
<td>#6</td>
<td>2 Hours</td>
</tr>
<tr>
<td>#7</td>
<td>3 Hours</td>
</tr>
</tbody>
</table>

[Click here](#) to schedule questions related to documents and software.

[Click here](#) to schedule technical assistance on account set-up, internal network preparation, SOAP service implementation, application install & SRS configuration, all testing phases, and connection.
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