PDMP TTAC

Prescription Drug Monitoring Program Training and Technical Assistance Center

IIR
Institute for Intergovernmental Research

RxCheck

Prescription Drug Monitoring Program

History of the RxCheck Hub

January 2021

In 2002, Congress appropriated funds for implementation and enhancement of prescription drug monitoring programs (PDMPs) through the Harold Rogers PDMP Grant Program. From its inception, the grant program has been administered by the Bureau of Justice Assistance (BJA), Office of Justice Programs, U.S. Department of Justice (DOJ). The grant funding supported states in implementing PDMPs, with an increase in the number of PDMPs from 16 (2002) to 54 (2020).

As more PDMPs became operational, many federal and state-level policymakers began to explore the value and necessity for interstate data sharing. Combining PDMP data from neighboring states would provide a more complete patient prescription history, thereby enhancing patient care. It was also well known that doctor shopping (multiple provider episodes) and cases of prescription drug diversion often cross state lines and that PDMP data from a single state are limited in their capacity to identify individuals potentially in need of intervention, whether by medical providers or investigative agencies. BJA recognized the importance of states sharing PDMP data and awarded funds to support PDMPs with interstate data sharing efforts and to develop an interstate data sharing solution. Today, interstate sharing of PDMP data is a top priority to ensure that health care professionals have a complete picture of their patients' prescription histories.

Early History

In 2005, BJA partnered with the Integrated Justice Information Systems (IJIS) Institute to begin exploring interstate data sharing. IJIS is a nonprofit organization working to promote and enable technology in the public sector. To move the project forward, BJA formed a PDMP workgroup called the BJA/IJIS PDMP Committee. The committee was composed of state PDMP administrators, federal staff, and IJIS representatives. The project became known as the Prescription Monitoring Information Exchange (PMIX). Its goals were to implement a standardized, secure, and scalable approach for the exchange of data among states and to establish a PMIX Hub (as it was referred to then), which would be the technology solution with which a PDMP would interface to exchange requests and data with other states.

Over the next several years, the committee worked on developing the technology and business rules for PMIX. The initial phase of the committee's work saw the creation of a set of reference documents describing a standard data model.

In May 2007, the project entered its second phase with a successful demonstration of a pilot point-to-point exchange of information between Nevada and California and the adoption of a national open-standards-based PMIX capability, conforming to the National Information Exchange Model (NIEM). The open standards, now known as the PMIX National Architecture, comprise a set of design requirements that all solutions for interstate sharing of prescription data should follow. A critical component of the Architecture was the use of open standards, which may be defined as information technology (IT) design elements in the public domain that are available free of charge. Adopting the open standards helps ensure that a community, such as PDMPs, has the ability to remain agile and reduce costs. The Architecture helps ensure that each technology solution is sufficiently similar that no matter which solution a state chooses, it may still share data with a state that has implemented a different solution. The PMIX Architecture

allows states to choose a solution best suited for their needs and be confident that it can communicate with other solutions.

In the final phase of the project, the focus was to demonstrate a prototype exchange of PDMP information using an intermediate hub server and create a set of reference documents to assist the states with design and implementation.

By the end of 2010, the PMIX Hub installation was completed and active for transactions between Ohio and Kentucky.

In 2011, the PMIX Hub became known as the RxCheck Hub, and the RxCheck Governance Board was established with the support of BJA.
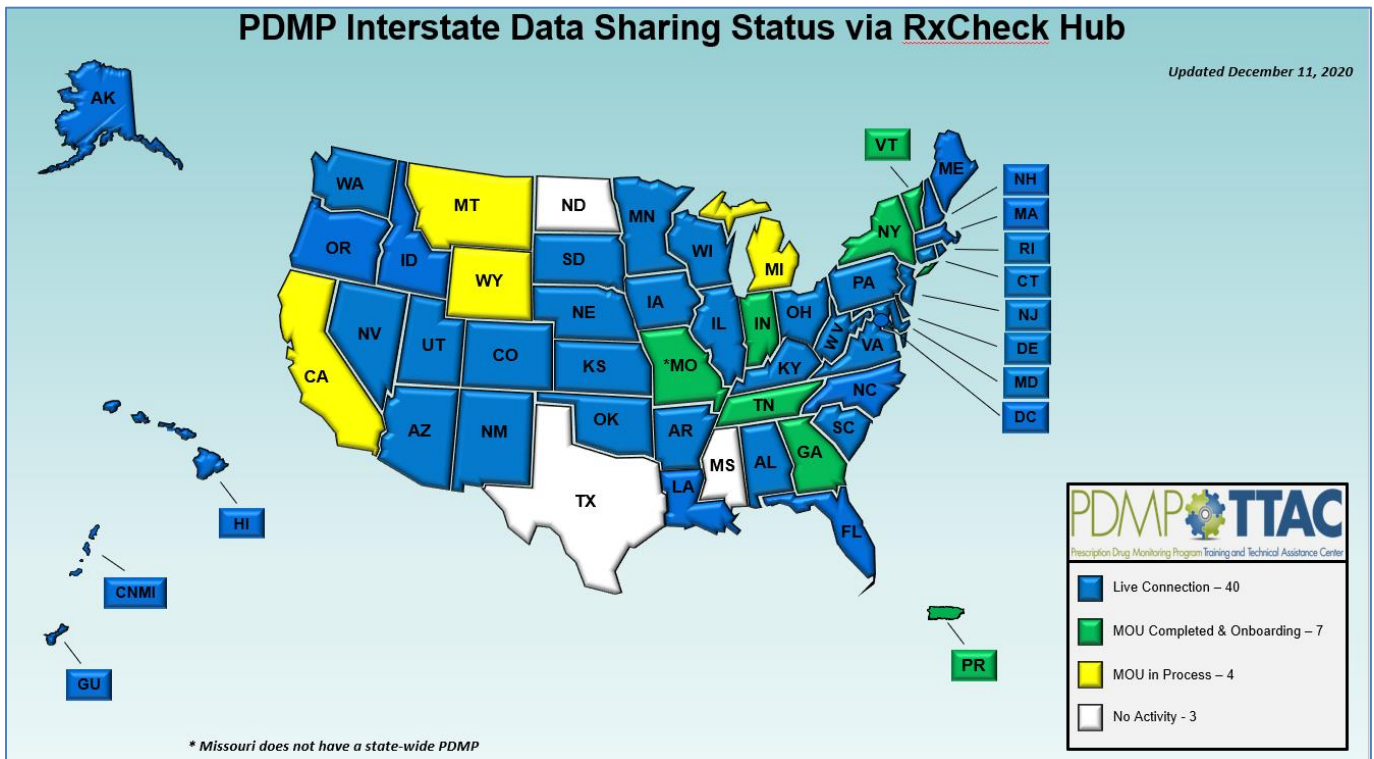
RxCheck Hub version 2.0 went live in August 2018, along with sharing data with other states, and has the capability to integrate with Health information Exchanges (HIEs), Electronic Health Records (EHRs), and Pharmacy Management systems (PMSs). Furthermore, it has an auditing feature and added security layers to access using an Application Program Interface (API) key. Its RxConsole supports a central Public Key Infrastructure (PKI) database and a translation that is built into the Outbound State Routing Service to enable National Council for Prescription Drug Programs (NCPDP) and Fast Healthcare Interoperability Resources (FHIR) translations. NCPDP standard covers electronic transfer of prescription data between retail pharmacies and prescribers, and FHIR is a standard for exchanging electronic health records (EHR).

The RxConsole displays the status of each integration: Name, Code, Status, Integration type, and the Date and Time the site was added.

The RxConsole also has the following features:

- Shows data from inbound and outbound transactions.
- Tells who hosts the entity's connection (entity IT or vendor), premise or cloud-based, and persons who have access to the servers.
- Captures real-time transaction details of request(s) and response(s).
- Enables PDMP administrators to add/manage Health Care Entities, Site Details, Contact Details, Vendor Details, Manage Roles, and User Administration.
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- Allows administrators to enable access rights to selected provider roles for Interstate Data Sharing.
- Displays the request(s) made by Health Care Entities for integration with the state's PDMP system. Allows the PDMP administrator to approve or deny such request(s).
- Allows the PDMP administrator to grant or deny access of health care entities from selected PDMP sites. Only authorized health care entities that have been granted access will be allowed to make prescription report request(s) to a PDMP state.

- Enables PDMP administrators to add new PDMP users.
- Allows PDMP administrators to manage provider validations for Instate/Interstate Request(s) based on the selected DEA/ NPI options. This feature can be disabled by selecting the option "None."
- Allows PDMP administrators to create/cancel maintenance schedule request(s).
- Displays the available NCPDP taxonomy codes, along with their respective descriptions and PMIX roles.
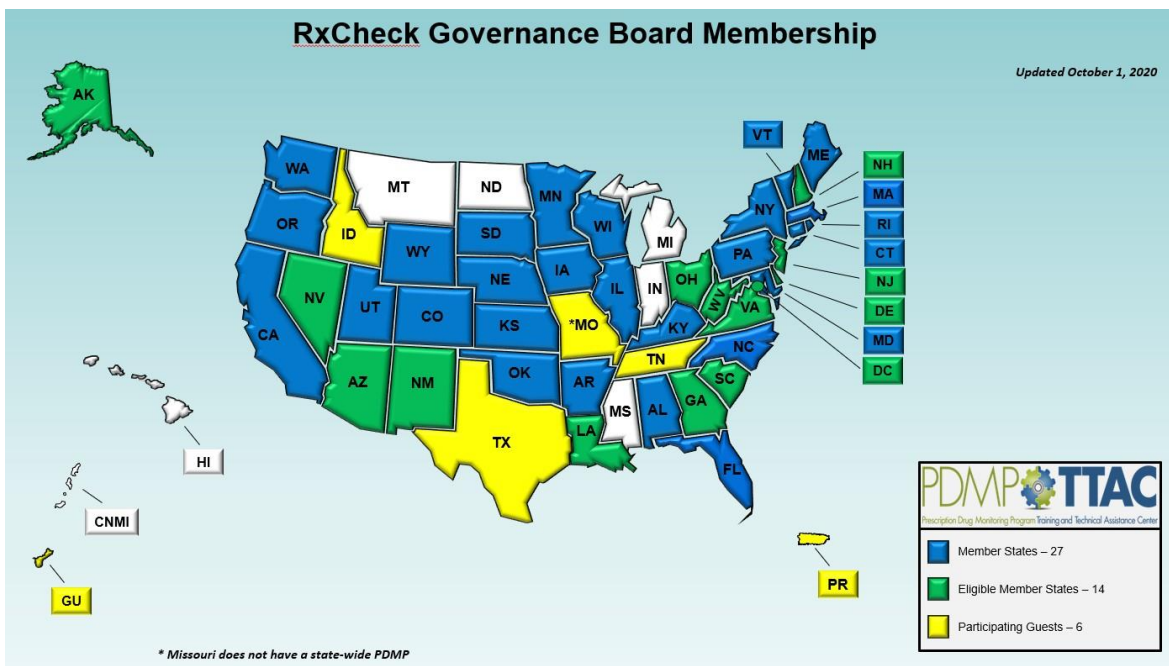- Depicts the onboarding status of each U.S. state with the RxCheck system on a U.S. map.

PDMP Interstate Data Sharing Status via RxCheck Hub

Updated December 11, 2020

Legend:
- Live Connection – 40
- MOU Completed & Onboarding – 7
- MOU in Process – 4
- No Activity - 3

* Missouri does not have a state-wide PDMP

RxCheck Governance Board

Initially, the membership of the RxCheck Governance Board was 11 PDMPs, with 3 PDMPs connected; today, the membership has grown to 27 members, with 40 PDMPs connected. An additional 7 PDMPs are in the process of connecting to the RxCheck Hub, with 4 other states reviewing the memorandum of understanding (MOU).

The RxCheck Governance Board is composed of PDMP administrators who are currently utilizing the RxCheck Hub or have provided written confirmation that the PDMP is developing or intending to develop a connection to the RxCheck Hub.

The general purposes for which the RxCheck Governance Board was formed are as follows:

- Ensure that the RxCheck Hub efficiently and securely shares prescription data among authorized users
- Recommend changes and enhancements to the RxCheck Hub and agree on the approved changes or enhancements.
- 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 support and ability of PDMPs to provide an efficient and comprehensive tool to curtail the abuse and diversion of prescription drugs
- Foster and support the use of open standards for the RxCheck Hub technology infrastructure and conformance to PMIX National Architecture

RxCheck Governance Board Membership

Updated October 1, 2020

Member States – 27
Eligible Member States – 14
Participating Guests – 6

* Missouri does not have a state-wide PDMP

Integration Efforts

In 2018, BJA and the Centers for Disease Control (CDC) co-sponsored a project to demonstrate a proof of concept integrating PDMP data with electronic health record (EHR) information through the RxCheck Hub. RxCheck provides free access to a secure data technology hub that facilitates interstate data sharing among state PDMPs, and PDMP integration with healthcare and pharmacy system partners within the states. The intent of the pilot project was to allow healthcare providers in clinical settings to access patient prescription history within their EHR workflow using the RxCheck Hub and RxCheck technology to facilitate the connection, translation, and exchange of PDMP data. BJA selected the pilot states, Illinois, Kentucky, and Utah, in February 2018. In October 2018, the testing phases were successfully completed for each state. The Proof of Concept was successfully completed in November 2018 demonstrating that a state can route data from its PDMP system to the State Routing Service (SRS), using NIEM, and its EHR can route data to the SRS. The RxCheck Hub and its integration efforts have proven to be successful.

In addition to the CDC, BJA and the RxCheck Hub is collaborating with other federal partners on integration, including the Office of National Coordinator (ONC), the Indian Health Services (IHS), the Veterans Health Administration (VHA), and the Department of Defense (DoD).

Summary

RxCheck is a fully operational hub that enables PDMPs to securely and efficiently share PDMP data. The RxCheck Hub infrastructure has been tested and validated and continues to implement the latest design improvements to meet the varied needs of the PDMPs.

The RxCheck Hub operates at no cost to PDMPs, providers, and vendors. BJA and the RxCheck Governance Board continue their commitment to preserving states' choice in selecting technology solutions that best address their needs. BJA and the RxCheck Governance Board are also committed to ensuring that each state has access to multiple platforms to support intra- and interstate data sharing and integration, regardless of the state's vendor choice. Additional information about the RxCheck Hub and the Governance Board can be found at https://www.pdmpassist.org/RxCheck.