



**NABP**  
NATIONAL ASSOCIATION OF  
BOARDS OF PHARMACY

## NABP PMP InterConnect: Sorting Facts From Fiction



Since their inception, prescription monitoring programs (PMPs) have proven to be effective in combating prescription drug abuse, misuse, and abuse on a local level. However, the issue of individuals crossing state lines is an often cited priority that is not addressed by traditional PMPs. An effective way to address this missing piece is by creating a holistic view of all the controlled substance prescriptions a person has received, regardless of the pharmacy or the state in which those prescriptions were dispensed. This view can be provided by a state PMP that is supported with an interstate data sharing infrastructure.

Providing this much needed infrastructure is NABP PMP InterConnect®, an interstate data sharing “hub” developed by the National Association of Boards of Pharmacy® (NABP®). Currently, 37 states are enabled to securely share PMP data through PMP InterConnect and several more states are in various stages of implementing the connection. The use of PMP InterConnect to share data has grown significantly from supporting a few thousand interstate transactions in 2011 to supporting over 11.8 million every month in 2016. NABP and the participating states all believe that the work is not complete until all 50 states are actively sharing data and fulfilling the ultimate mission of the PMPs – to improve patient safety, curb drug diversion, and save lives. However, barriers still exist to realizing this mission. Many of these barriers relate to misinformation regarding the technology standards. Unfortunately, this misinformation has kept some states from adopting the standards and infrastructure that 37 states have already reviewed and embraced, and that several more states are in the process of embracing.

Following are these misconceptions and the facts behind them.

**MISCONCEPTION:** *PMP InterConnect does not fully conform to the national data standard (the Prescription Monitoring Information Exchange (PMIX) Architecture) put in place by the federal government for PMP interstate data sharing.*

**FACT:** PMP InterConnect was developed with all of the standards utilized by the PMIX Working Group at the time that PMP InterConnect was created. PMP InterConnect data payloads use the exact same National Information Exchange Model (NIEM) Information Exchange Package Documentation (IEPD) data standard as defined in PMIX to facilitate the information exchange of

patient prescription drug history information. All PMP InterConnect data payloads validate against the XML schema as defined by the IJIS Institute in the *ijis\_pmix\_III\_niem\_2\_0\_iepd\_v0\_20\_20101108* version of the PMIX standard.

To secure the data, PMP InterConnect utilizes REST as the transport protocol for connecting the state web services, and key encapsulation for encryption of data. PMIX Architecture prescribes SOAP for the transport protocol and WS-Security for encryption. All are industry standards. PMP InterConnect provides a secure, functional, easy-to-use system utilized by 37 states.

**MISCONCEPTION:** *PMP InterConnect has security “issues” and does not conform to the security and encryption standards set forth in the PMIX Architecture.*

**FACT:** As stated above, while the data standards developed by the original PMIX Working Group were used in the creation of PMP InterConnect, the security and encryption standards specific to the PMIX Architecture were not addressed until after PMP InterConnect was already in development.

PMP InterConnect utilizes a different – yet equally secure – standard for data encryption and transmission. It is a very well recognized and widely adopted standard across multiple industries. In fact, PMP InterConnect uses the standards most common in the health care industry for data security. Appriss, Inc, NABP’s vendor for PMP InterConnect, has also passed a Health Insurance Portability and Accountability Act (HIPAA) audit and is confirmed to be HIPAA compliant.

It should be noted that at no time can PMP InterConnect decrypt the protected health information or personally identifiable information that is passing through it. Message confidentiality is guaranteed from end to end.

**MISCONCEPTION:** *PMP InterConnect has issues with patient matching thereby causing significant security concerns.*

**FACT:** By design, PMP InterConnect cannot “open” any of the encrypted information transmitted by states. Patient-matching algorithms are the domain of the PMP systems operated by each state, utilizing varying levels of sophistication to link records relating to an individual. This is not a problem unique to PMPs but is common in all arenas of electronic data. Furthermore, NABP’s vendor, Appriss, was recently audited for HIPAA compliance by an independent third party. No security issues were identified.

**MISCONCEPTION:** *NABP was asked to conform to the national standard but the PMP InterConnect governing body made the decision to not move forward with interoperability.*

**FACT:** The decision was actually to move forward with interoperability by working with Bureau of

Justice Assistance (BJA) and the PMIX Working Group to expand and evolve the PMIX architecture instead of continuing to develop a hub-to-hub model which, even after many years, had not produced any tangible results. NABP has had several meetings and discussions with the BJA, which is open to PMP InterConnect technology that is working for 37 states.

**MISCONCEPTION:** *PMP InterConnect is not cost effective because while NABP has been offering this service at no cost, they have stated they do not intend to offer it free of charge indefinitely.*

**FACT:** NABP has funded all development and operating costs for PMP InterConnect to date from its own resources.<sup>1</sup> States pay nothing to connect to PMP InterConnect or to utilize the hub for data sharing (although a state’s PMP software vendor may charge the state for the state-side connection.) NABP is committed to funding PMP InterConnect. As is stated on the NABP website, “it is the Association’s goal that states will never have to pay annual participation fees to participate.” In June 2016, NABP announced that PMP InterConnect will continue to be offered to states at no cost.

**MISCONCEPTION:** *States receiving federal grants to operate their PMPs are required to use a hub that conforms to the PMIX standard and may lose future grant funding if they connect to PMP InterConnect.*

**FACT:** Since 2012, BJA has provided guidance to the states to allow for the use of PMP InterConnect:

“ . . . BJA will immediately permit HRPDMP grant funding to be utilized for implementation of NABP’s PMP Interconnect solution for those states that require it.”<sup>2</sup> [May 30, 2012. See <https://www.bja.gov/Programs/PDMPPolicy.pdf>]

These PMP InterConnect states have or had a BJA grant at the same time that they were part of PMP InterConnect.

2015 BJA Grant: Colorado, Kentucky, Nevada, New Jersey, Ohio, and Oklahoma

2014 BJA Grant: Arkansas, New Mexico, Ohio, and Wisconsin

2013 BJA Grant: South Dakota

2012 BJA Grant: Indiana and Kansas

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These states became part of PMP InterConnect after they received a BJA grant.

2013 BJA Grant: New Jersey

2012 BJA Grant: Illinois, Kansas, Kentucky, North Carolina, and Oklahoma

**MISCONCEPTION:** *NABP governs the operation of PMP InterConnect and allows participant state PMPs only an advisory role in the operation of the system.*

**FACT:** The PMP InterConnect Steering Committee governs the strategic, technical, and operational evolution of PMP InterConnect. The Committee is composed exclusively of representatives of the state PMPs that participate in the system. The only thing that the participating PMPs do not control is the funding that supports the system. Funding is the responsibility of the NABP Executive Committee, which is composed of members and administrative officers of state boards of pharmacy elected by the NABP membership.

### When and Why PMP InterConnect Was Developed

The effort to create an interstate data sharing infrastructure predates PMP InterConnect. In 2005, BJA funded a PMIX Working Group consisting of PMP vendors, federal agency personnel, technology and standards experts, state PMP administrators, and the IJIS Institute, an organization that provides technical assistance to federal, state, and local enforcement agencies in areas such as information exchange. One outcome of this group's efforts was the development of a standard known as PMIX IEPD which defines the various types of data involved in exchange of information between PMPs. In addition, numerous technical artifacts were created and publicly available related to the structure and function of the hub envisioned by the Working Group.

Meanwhile, several states, frustrated at the slow progress of the PMIX Working Group, approached the NABP in fall 2010 to inquire about NABP's interest and

ability to develop an interstate data sharing hub based on the standards defined by the PMIX Working Group. NABP partnered with Appriss, a technology provider with extensive experience providing technology solutions to federal, state, and local agencies. With a strong focus on implementing a working hub that supported the secure exchange of data between states, PMP InterConnect adopted the PMIX standards that were in place in 2010 and added well-established technology standards related to security, encryption, and connecting systems. After intensive development activities over seven months, NABP launched PMP InterConnect in mid-2011 and connected four states in 2011.

Also in 2011, the first version of the PMIX hub was launched with test transactions between two states – Ohio and Kentucky. This first version, however, did not implement the roles, routing, or security elements associated with an architecture. The PMIX Working Group later recommended an architecture that added other elements including user roles, routing of request messages, and security. Today that hub supports transactions among four states.

### Summary

NABP and all the states that participate in the PMP InterConnect data sharing arrangement have focused on developing and operating a highly secure system that supports real-life exchange of patient data with authorized users to improve patient safety and minimize drug abuse, addiction, and diversion. This relentless focus on practical, real-life solutions has led to the tremendous growth in participation; nearly 75% of the nation uses PMP InterConnect to exchange data for millions of patient encounters each year. While the job is not completed until every single state is connected and every patient encounter leverages this crucial information, we take immense pride in the progress made in the four short years since NABP was approached by the states to deliver a viable, scalable, affordable solution.

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<sup>1</sup> NABP is paying for all costs associated with the development and implementation of PMP InterConnect using exclusively its own revenues derived from program resources and its reserves. NABP has the financial resources to make this commitment without the need to use any outside funding sources. [See [www.nabp.pharmacy/initiatives/pmp-interconnect](http://www.nabp.pharmacy/initiatives/pmp-interconnect)]

<sup>2</sup> See <https://www.bja.gov/Programs/PDMPPolicy.pdf>