Information Summary

Status of the Integration of Electronic Health Record Systems with the Prescription Monitoring Program Under ESHB 1427 (Chap. 297, Laws of 2017)

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Washington State Department of Health

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Executive Summary

Passed in 2017, Engrossed Substitute House Bill 1427 (ESHB 1427) requires the Department of Health (department) to expand access to the Prescription Monitoring Program (PMP) to further address the opioid epidemic. The bill broadens the department's ability to assess PMP and overdose data. It provides PMP data access to:

- Local health officers for overdose follow-up;
- The coordinated electronic tracking program for emergency department providers and overdose notification;
- Health facilities, entities, and provider groups for improving prescribing practices; and
- The Washington State Hospital Association and Washington State Medical Association for use in their Medical Officer Collaborative Safe Table (a coordinated quality improvement program).

Section 10 of the bill requires the department by November 15, 2017, and annually thereafter, to report to the governor and the appropriate committees of the legislature on the number of facilities, entities or provider groups that have integrated their federally certified electronic health record (EHR) systems with the prescription monitoring program, using the state Health Information Exchange (HIE). The HIE provides cost savings for the department, the state, and our trading partners by allowing multiple data systems to be accessible using one annual fee and connection point.

As of December 11, 2017, the following health systems have integrated PMP data into their EHR system through the HIE:

- Emergency Department Information Exchange – this network now provides PMP data to 87 emergency departments out of 97 acute care hospitals in Washington. The patient data is requested automatically when the patient registers with the emergency department.
- Valley Medical Center (Renton) is in production and has rolled out the integration system-wide.
- PTSO of Washington[1] is piloting 1 of their 71 clinical locations.

As of December 11, 2017, the following health systems have begun testing a connection between their EHR and the HIE:

- Kaiser Permanente Washington
- University of Washington
- Providence/Kadlec Regional Medical Center

[1] PTSO is a healthcare technology services organization that provides support to community health centers.

As of December 11, 2017, the department had received registrations from 118 health systems interested in connecting to the PMP through the HIE in an effort to receive meaningful use credit toward their public health objectives. These health systems represent more than 1,301 clinic locations around the state. The department and our vendors continue to assist health systems register for meaningful use and to test their connection with the HIE for PMP data.

Introduction and Brief History

Misuse and abuse of prescription opioids is a nationwide epidemic. The leading cause of accidental death in Washington State is no longer motor vehicle-related accidents, as it used to be, but rather from poisoning, much of which is caused by controlled substances. Washington State has focused on addressing this issue since 2008, when the department formed an interagency workgroup. The department's statewide plan for addressing the epidemic is online at http://stopoverdose.org/. Governor Inslee issued an Executive Order in October 2016 implementing the state plan, which includes a major focus on the PMP.

Most states have implemented a PMP as a means of addressing this public health issue. The purpose of a PMP is to collect all records for controlled substances into a central repository and relay that information back to healthcare providers (so that they can make better care decisions for their patients) along with other entities to address the epidemic.

Washington State implemented its PMP in October 2011. The following legislation has helped to improve access to the PMP by healthcare providers:

- House Bill 2730 (2016 Legislative Session) added access to patient data for legend drug prescribers and opened up access for state licensed facilities and provider groups.
- House Bill 1427 (2017 Legislative Session) expanded facility and provider group access for federal and tribal facilities via the HIE along with several other things to address the opioid epidemic.

Washington has not mandated use, in part, due to a lack of ease of access and difficulties for providers in incorporating the PMP into their workflow.[2] This has resulted in a low percentage of prescribers who use the PMP (around 30-40%). Providers have indicated in surveys that if the PMP was part of their healthcare system's EHR, they would be more likely to use it, as it would be integrated into the clinical workflow of their EHR.

In 2013, Washington State began work to electronically connect the PMP to the Emergency Department Information Exchange and one EHR system (Epic®). To facilitate this transaction, Washington State began working with OneHealthPort, the state HIE, to help foster this collaboration among health system EHRs and the PMP.

[2] As the systems are not always connected, providers often do not have time to log into another system to check prescription drug use during short appointments with patients.

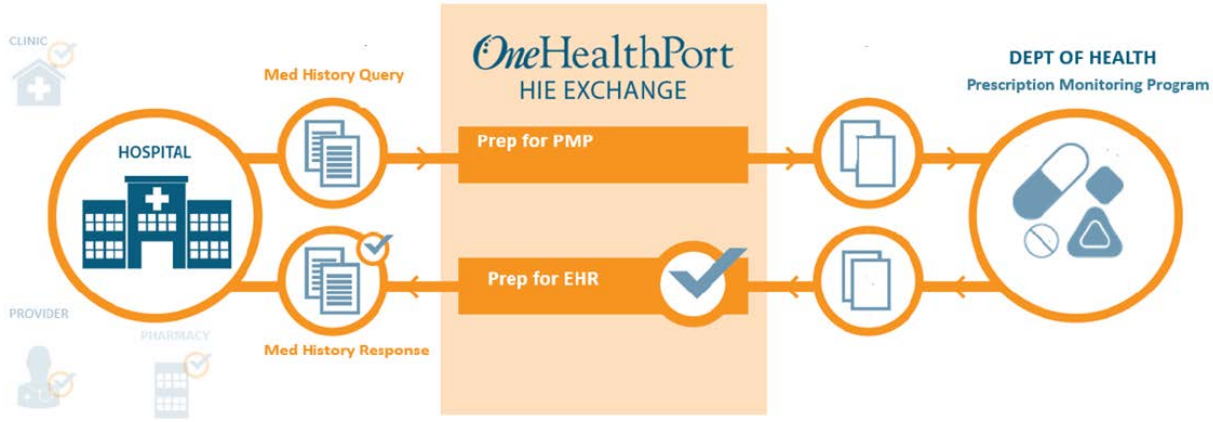

Figure 1: Basic diagram of EHR-HIE-PMP connection

Washington State received a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) in October 2012 to build a connection to the HIE. Initial connection with the HIE occurred in November 2013. After working through some barriers, the first emergency department connected to the HIE in November 2014.

In early 2015, the department declared the PMP an official public health "specialized registry" eligible under CMS Medicare and Medicaid EHR Incentive Programs for meaningful use (MU) to allow eligible providers to meet one of their required public health objectives. This federal program is designed to provide incentive payments to healthcare professionals and hospitals to promote the adoption and use of electronic health records. MU is the application of certified EHR technology to ensure it is connected in a manner that provides for the electronic exchange of health information to improve the quality of care and population health; and that in using that technology, the provider must submit to the secretary of Health and Human Services (HHS) information on quality of care and other measures. By making the PMP available for MU credit, the department helped build extra business incentive to assist healthcare systems with creating the integration between their EHR and the PMP. Later in the process, federal requirements shifted to also allow credit for eligible hospitals. Current federal proposed rules may change the name of the incentive program from MU to Quality Payment Program (QPP), transitioning this from payment bonus to a higher reimbursement rate for providers fully meeting measures and objectives.

Through the summer of 2015, PMP staff members worked with technical staff members from the department's system vendor, the HIE, and Epic® in developing and pilot testing of this connection and transaction for the Epic® EHR system. Epic® developed and released a module to its Washington clients in December of 2015. This new module allows Epic® users to connect and ingest PMP data directly to the patient record in the native EHR. In May 2017, the first Epic® customer, Valley Medical Center, finished testing and went into production with its connection.

Previously in Washington State, the only way for a provider to interact with the PMP was to log into a web portal and manually search for a patient's name, select the possible patient matches, and then see what prescriptions the patient had received. Integrating the state's PMP in the EHR through the HIE streamlined the workflow for the providers, as they no longer have to log into an

additional web portal, which disrupts the natural workflow of a visit and detracts from individualized patient care. Integration of these data systems improves workflow and productivity with streamlined background automation.

Prior to automated system queries through the HIE, the web portal for the PMP received roughly 400,000 to 900,000 queries per year (see figure 1). After implementing one automated system in November 2014, queries jumped by more than 2.2 million in a year; these data reflect queries from emergency department care settings only. If this automated process was moved to primary care, there would be another drastic increase in queries.

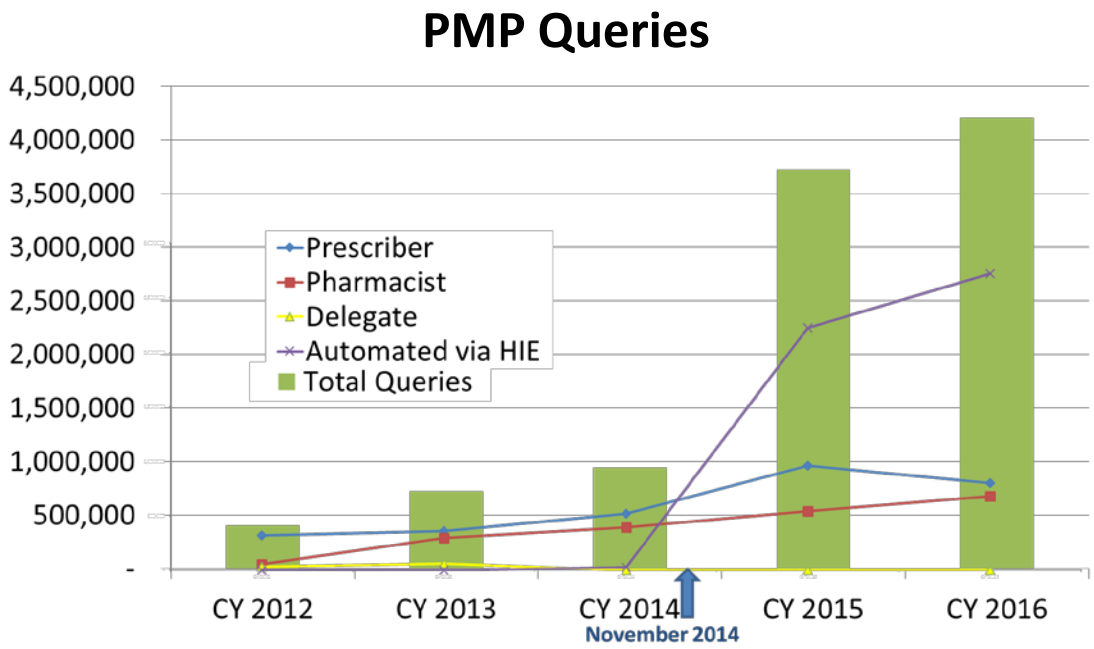

Figure 2: PMP Queries

The number of eligible providers and hospitals that have registered their intent with the department for Meaningful Use reporting within the past year has increased. Registration for MU with the department is done through an online survey. Beginning in fall 2015, registration for facilities that wanted to onboard and query PMP data increased dramatically. As of December 11, 2017, 118 registrations including 1,301 total clinics have registered for PMP as a MU measure with the department.

Benefits of using the HIE

Use of the statewide HIE provided by OneHealthPort for PMP integration provides several benefits for healthcare systems as well as the department:

- **Integration into clinical workflow.** This effort allows the clinician to have the PMP data built right into their workflow within the EHR system they are already using for their work. This greatly enhances their ability to regularly use this important data in treatment decisions. Epic® has chosen to make this a part of their medication reconciliation module providers already use to review medication history.

- **Fewer data use agreements**. By using the HIE, the department is able to sign onto a single memorandum of understanding for protecting the data being transmitted. This is signed by each trading partner using the HIE and contains the PMP-specific language they must agree to. This reduces the time and money that would be spent executing individual agreements with each health system.

- **Maintenance of only one connection**. There is a cost associated with maintaining this type of IT connection between the HIE and the PMP database. By using the HIE, the state has to pay for and maintain only one connection instead of separate connections to each healthcare system, as the HIE provides the connections out to the healthcare systems. Again, this saves time and money.

- **Annual flat fee for use**. The HIE charges a single annual fee (Figure 1) to each trading partner based on its revenue using a sliding scale. The annual fee allows each partner to trade as many transactions it wants for the PMP and any other transaction that the HIE is set up for. The HIE charges no transaction costs or per provider costs. Several other DOH transactions are also available through the HIE in addition to the Washington Healthcare Authority clinical data repository (CDR). The CDR provides comprehensive clinical data to providers treating Medicaid patients. Using this single connection for multiple data sets saves the state and the health systems time and money. Many (>390) health systems in Washington State are already trading partners and are already paying the annual fee. These systems are already gaining benefit from the HIE by trading some of the many other transaction types the HIE offers, for example, Cancer Registry, Immunization Registry, Syndromic Surveillance, and Electronic Lab Reporting. For a complete and current list of systems trading health information see the webpage: www.onehealthport.com/hie/participants.

ORGANIZATION LEVEL	ANNUAL ORGANIZATION NET OPERATING REVENUE	ANNUAL SUBSCRIPTION FEE
Entry	$0 - $10 Million	$600
Small	$10 Million - $100 Million	$6,000
Mid-size	$100 Million - $500 Million	$12,000
Large	$500 Million - $1 Billion	$24,000
Leadership	$1 Billion Plus	$48,000

Figure 2: HIE Annual Fees

Barriers to Integration

While integrating PMP data into the clinical workflow has been shown to be the most effective way to increase access and use of the data, there are some challenges to this effort:

1. **Security requirements**. Many federal and state security requirements must be met to safeguard the protected healthcare information in the PMP database. The current web-based PMP portal meets these security requirements but, as a result, is cumbersome to use. The HIE to EHR integration meets all security requirements while greatly improving

ease of access. Some health systems, though, may have challenges ensuring their EHR is able to connect to this secure infrastructure. If their system, for example, is not federally certified it might not meet all the requirements for security that our HIE mandates.

2. **Cost**. Three potential costs include: Cost to their EHR Vendors, HIE annual fee, and internal IT costs.

    a. While Epic® has made a free System Update (SU) available to customers, not all EHR vendors have. Depending on the size of the provider group, facility or health system, the cost to pay their vendor for the update needed or to build it themselves may be cost-prohibitive (although many EHRs have a medication history request feature that can be configured to work in our state). We use a national standard already for medication history requests to keep cost down for implementation. Cost information from integration pilots[3] done in other states indicates a possible cost range from as low as $32,500 and up to $111,877.

    b. The other cost is joining our state HIE. While it does cost money, it provides a flat annual charge under which a health system can exchange many different data types, not just PMP data. Again, several health systems will not have this cost as they are already a trading partner of the HIE, and there is no additional charge for other information.

    c. Another cost consideration is that some health systems may lack the internal IT support needed to get the updates implemented.

3. **Prioritization**. Health systems have many technology needs and requirements. With limited IT resources, work such as the PMP integration must be added to and prioritized with other technology work. Once this work is prioritized we believe the IT effort to be manageable given the national standard being used that is often used already by health systems and the fact that many have an agreement with and connection to the HIE.

4. **EHR Vendor**. Again, the Epic® EHR has built out functionality for its customers that meets the Washington State requirements and integration model. Other vendors have developed similar modules for medication history requests (using the National Council for Prescription Drug Programs national standard we use) but have not modified their system to send that history request to the Washington PMP. This is a challenge for some of our healthcare systems as they try to convince their EHR vendors to configure their software for our state. This can also be a challenge if the healthcare system currently uses more than one EHR. Other issues could include investing in a system that may change or if the healthcare system is going through a vendor transition.

[3] https://www.healthit.gov/pdmp/PDMPConnect (Pilot Summary Papers FY12)

Recommendations

The PMP is an effective patient safety tool for addressing the opioid epidemic, and it is clear more needs to be done to address the opioid epidemic in Washington State. The PMP is a critical tool in Washington's efforts and needs to be used more often by healthcare providers. Reviewing PMP data during a patient encounter can greatly assist a provider in giving better care, which in turn should reduce the number of patients who are at risk for adverse outcomes. The most effective way to eliminate this barrier is to incorporate PMP data into their workflow.

Through a PMP customer survey, healthcare providers indicated their primary reason for not regularly using the PMP is the extra time and effort required to access a system outside of the clinical workflow of their EHR. The small amount of time providers have for each patient encounter makes it challenging to access this valuable information along with all the other important clinical functions they must perform.

Integrating with the HIE provides access to PMP data while still meeting vital security requirements that protect patient information from being inappropriately released or used. The HIE in our state is uniquely positioned to provide several cost-saving services to assist the department and our healthcare systems in connecting.

The department has found that when providers have seamless access to the PMP data (within their own workflow), it is more frequently used. This is essential to ensure better treatment decisions are made resulting in better patient outcomes. Therefore we recommend the following:

1. The department recommends that the legislature work with appropriate entities to consider how hospitals and clinics can be further incented to connect to the PMP. We have been pleased to work with state leaders on this issue and are hosting an upcoming meeting with partners, including EHR representatives, to explore how to make improvements in a timely and effective manner.

2. The department strongly urges hospitals and clinic systems with the Epic® EHR to install the PMP module, and connect to the HIE, if they have not already done so. This allows them to not only send PMP data requests but to transact other data sets for one annual cost. We will continue working with providers and systems to integrate their EHR with the contracts we have in place with our state HIE and our PMP vendor, Appriss.

3. The department strongly urges hospitals and health professional associations to partner with the department and OneHealthPort in encouraging healthcare systems, EHR vendors, and provider groups to access PMP data through the HIE and to update their EHR systems to connect and ingest PMP data. We also encourage our partners to look to 3rd party vendors who may be able to build a connection for their EHR system that meets the state and HIE requirements. We are considering our options and look forward to working with providers, hospitals, and state leaders to develop solutions.

Appendix A: Stakeholder Feedback

The department posted a draft of the report online in order to receive public comment. The following table summarizes the comments received and how the department did or did not incorporate them into the final report.

Section	Comment	Response
Executive Summary	Request to provide full name of coordinated quality improvement program.	Incorporated into the final report.
Executive Summary	Request to ensure status of testing and integration is up to date.	Incorporated any updates to the lists of those in production and those still testing.
Executive Summary	Request to include a list of all 118 health systems and 1,301 clinics who have registered for PMP meaningful use.	The list is available but was not incorporated to ensure the length of the report was appropriate.
Benefits of Using the HIE	Request to add benefits of imbedding the information into the workflow.	Incorporated into the final report.
Benefits of Using the HIE	Request to include a table of the annual fees from the state HIE.	Incorporated into the final report.
Barriers to Integration	Request to include additional potential barriers.	Some were incorporated into the final report.
Barriers to Integration	Request to add data on the market share for the Epic® EHR in Washington state.	DOH does not have this information at this time but would like to see if this information can be obtained for subsequent reports.
Conclusion and Recommendation	Request to consider not just PMP use increasing but increasing the number of providers who look at or have easy access.	DOH believes that the primary purpose of integration is to increase use.
Conclusion and Recommendation	Request to include additional recommendations around funding integration costs, reimbursement for checking the PMP, best practices for integration, and working to encourage more vendors to offer this connection.	DOH did expand upon its recommendations, although it did not address funding or reimbursement as DOH believes this is a cost appropriately borne by the healthcare delivery system.