

# Prescription Monitoring Program Integration Project

Year Two Final Evaluation



Prepared by Hornby Zeller Associates, Inc.

*for* The Maine Office of Substance Abuse and Mental Health Services



Department of Health and Human Services

Maine People Living Sale, Healthy and Productive Lives

Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

# Prescription Monitoring Program Integration Project

Year Two Final Evaluation

Hornby Zeller Associates, Inc. 373 Broadway South Portland, ME 04106 (207) 773-9529 <u>me@hornbyzeller.com</u> www.hornbyzeller.com



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## **EXECUTIVE SUMMARY**

In 2012, the Maine Office of Substance Abuse and Mental Health Services (SAMHS) received funding from the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration to implement the Prescription Drug Monitoring Program (PMP) Electronic Health Record Integration and Interoperability Expansion program in Maine. The purpose of the federal program is to improve real-time access to PMP data by integrating PMP databases into existing technologies (such as electronic health records) and to strengthen State PMPs by providing resources to increase interoperability of State PMPs, meaning prescribers will have access to patient-specific data across states.

SAMHS contracted with Hornby Zeller Associates, Inc. (HZA) to conduct a year one process evaluation of the implementation of grant strategies including the administration of a survey to individuals registered to use PMP as well as a final, year two evaluation of the implementation of grant strategies and overall completion rates for all grant requirements.

At the end of year two, SAMHS has met most of the objectives of the grant and has solid start dates in the spring of 2015 to complete most of the remainder during the one-year no-cost extension approved by SAMHSA. The requirements that have been fulfilled as of December 2014 include: data sharing with two states, signed MOUs for interoperability with two states, progress toward signing MOUs in 22 states, and software upgrades. We have heard rave reviews from our prescribers with regards to the single sign-on tool that is available on the HIN clinical portal for the PMP. They have all said how efficient it is.

Prescriber Association
 Representative

Maine has achieved a large increase in the number and percentage of registered prescribers due to mandatory registration provisions; an increase in the number of providers requesting patient reports, the establishment of Critical Medical Education (CME) trainings for medical providers, as well as the implementation of a single sign-on process linking the PMP to the state's health information exchange (HIE). Objective number one will not be fully completed by the end of this project: achieving interoperability with eight other states, including four New England States. This is largely due to unforeseen barriers that occurred during the pursuit of interoperability, including other state's legislation permitting it, and the time constraints involved with partner states enacting new legislation. In addition, SAMHS took into account the recommendations from the year one process evaluation done by HZA and successfully integrated these into the objectives for year two. This included simplifying the password retrieval process by creating an online automated password retrieval system; enhancing the system to allow users to update their personal information electronically; producing online training tools that educate prescribers on the use of the HIE single sign-on process, as well as providing other tutorials regarding the use of the PMP. These are available under the resources link on the PMP website: (http://www.maine.gov/dhhs/samhs/osa/data/pmp/resources.htm).

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# **INTRODUCTION**

In 2012, the Maine Office of Substance Abuse and Mental Health Services (SAMHS) received funding from the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) to implement the Prescription Drug Monitoring Program (PMP) Electronic Health Record (EHR) Integration and Interoperability Expansion program in Maine. The purpose of the federal program is to:

- improve access to PMP data by linking PMP databases into existing technologies (such as electronic health records) and thereby improve the ability of State PMPs to reduce the nature, scope, and extent of prescription drug abuse; and
- 2) strengthen state PMPs that are currently operational by providing resources to make the changes necessary to increase interoperability of State PMPs.

The Prescription Drug Monitoring Program (PDMP) was created by the FY 2002 U.S. Department of Justice Appropriations Act (Public Law 107-77) and has received funding under each subsequent year's Appropriations Act. The primary goal of this program is to enhance the capacity of regulatory and law enforcement agencies to collect and analyze controlled substance prescription data through a centralized database administered by an authorized state agency and federally recognized Indian tribal governments. The PDMP allows for states' discretion as they plan, implement, and enhance a PDMP to accommodate local decisionmaking based on state laws and preferences, while encouraging the replication of promising practices.

A state's Prescription Monitoring Program's (PMP) electronic database contains patient-specific information on controlled substances dispensed in each state. PMPs assist state governments in identifying possible sources of prescription drug diversion such as prescription fraud, doctor shopping, and medically unwarranted prescribing practices. States also can use PMPs to analyze drug use and abuse trends and educate individuals and the public about prescription drug misuse, abuse and diversion. Additionally, healthcare providers can use PMPs to help identify people who may be addicted to prescription drugs and refer them to treatment. Evidence suggests that PMPs are effective in reducing the time required for drug diversion investigations, reducing "doctor shopping," improving clinical decision-making, changing prescribing behavior, and contributing to other efforts to curb prescription drug abuse and drug overdose.<sup>1,2,3,4</sup>

http://www.pdmpexcellence.org/sites/all/pdfs/pmp\_effectiveness\_brief\_revised\_3\_29\_12.pdf

<sup>3</sup> Centers of Disease Control and Prevention. (2012). Prescription Painkiller Overdoses: A growing epidemic, especially among women. *CDC Vitalsigns*. Available at http://www.cdc.gov/vitalsigns/PrescriptionPainkillerOverdoses/

<sup>&</sup>lt;sup>1</sup> PMP Center of Excellence. (2012). *PDMPs: an effective tool in curbing the prescription drug abuse epidemic.* Brandeis University. Available at

<sup>&</sup>lt;sup>2</sup> PMP Center of Excellence. (2012). Prescription drug monitoring programs: an assessment of the evidence for best practices. Brandeis University. Available at

http://www.pdmpexcellence.org/sites/all/pdfs/Brandeis PDMP Report.pdf

Currently, Maine is one of 48 states with an *operational* PMP; 49 states and one territory have passed legislation authorizing a PMP, and one state (Missouri) has no PMP or legislation in place.<sup>5</sup> A state's use of its PMP varies depending on the purpose of its creation. For example, a state may choose to establish a PMP for the purposes of law enforcement, legal and regulatory compliance, or patient care and safety. Maine's PMP is operated by the Substance Abuse and Mental Health Services office, an agency of Maine's Department of Health and Human Services. In Maine, the PMP is intended to be a tool to improve patient care and safety while helping to prevent and detect prescription drug misuse, abuse and diversion.

Maine's legislature established the PMP in 2003, and it became operational in 2004. SAMHS operates the PMP, with data system support from Health Information Design (HID), a PMP software vendor. All pharmacies licensed by the State of Maine are required to report data weekly on all transactions for federally controlled substance schedules II, III and IV.<sup>6</sup> In August of 2015, pending legislature approval, pharmacies licensed by the State of Maine will be required to report data every 24 hours on all transactions for Schedule II–IV controlled substances. The database is available online, free of charge, to prescribers and dispensers of controlled substances.

In January 2014, SAMHS determined that provider participation levels among Allopathic Physicians, Osteopathic Physicians, Dentists, Physician Assistants, Podiatrists, and Advanced Practice Registered Nurses licensed in the State of Maine did not meet statutory participation requirements for the Prescription Monitoring Program. Specifically, fewer than 90 percent of practitioners were participating as of January 1, 2014.

As a result, all licensed individuals in the above disciplines were required to register by March 1, 2014. This legislation was then repealed upon the passage of new legislation (LD1840) enacted on April 30<sup>th</sup>, 2014. This new legislation, effective August 1, 2014, requires automated registration to the PMP at the time of licensure or license renewal for individuals prescribing schedule II–IV controlled substances. To meet this statute the PMP worked with the licensure boards and the PMP vendor to create an automated process for enrolling prescribers of controlled substances when they apply for or renew their professional license. This process will be active effective March 31st, 2015,<sup>7</sup>

http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf

<sup>6</sup> U.S. Department of Justice, Drug Enforcement Administration, Office of Diversion Control. Controlled Substance Schedules. Available at <u>http://www.deadiversion.usdoj.gov/schedules/index.html</u>

<sup>7</sup> PMP Changes and Enhancements available at:

http://www.maine.gov/dhhs/samhs/osa/data/pmp/files/PMPChangesEnhancements.pdf

<sup>&</sup>lt;sup>4</sup>Finklea, K.M., Bagalman, E. & Sacco, L. (2013). Prescription Drug Monitoring Programs. Congressional Research Services. Available at <u>http://www.fas.org/sgp/crs/misc/R42593.pdf</u>

<sup>&</sup>lt;sup>5</sup>Prescription Drug Monitoring Program Center of Excellence at Brandeis. Briefing on PDMP Effectiveness. Updated September 2014. Available at:

Any health care provider with a Drug Enforcement Agency (DEA) number may register to request reports for new and existing patients. A threshold report is a report automatically generated by the PMP system, based upon an algorithm. The report informs the prescriber when a patient has reached or surpassed a prescription threshold that is considered to be potentially dangerous or warrants further monitoring. Licensed pharmacists may also access the PMP to request patient reports and patients have access to their own information by requesting it from their healthcare provider or from SAMHS.<sup>8</sup>

This PMP Integration Project was intended to enable SAMHS to improve Maine's PMP in three main areas:

- Interoperability. Create interoperability with at least eight other states, which means
  prescribers in Maine will have access to patient-specific data on controlled substances
  dispensed in those states, and prescribers in those states will have access to similar
  patient data in Maine. Historically, state PMPs have not communicated with each other
  due to technological barriers with interoperability, legal issues and the lack of
  sustainable funding. Several initiatives are underway nationwide to address the
  technological and legal issues, as interoperability is an important feature of a PMP's
  toolbox.
- Integration. Integrate the PMP database with Maine HealthInfoNet (HIN), Maine's Health Information Exchange (HIE) and the centralized hub for electronic health records in Maine. HIN formed in 2006 and started a demonstration project in 2008 connecting 15 Maine hospitals and one multi-site primary care practice. Currently, 34 of Maine's 38 hospitals and several hundred physician practices and other health care providers have access to patient electronic records through HIN.<sup>9</sup> When PMP is integrated into this system, those health care providers who also use the state's Health Information Exchange (HIE) run by HIN will have "one click" access to patient records in PMP, resulting in increased integration of health care information and potentially improved patient care.
- System Enhancements. Enhance the PMP system by 1) creating a tracking system for referrals to substance abuse treatment that result from healthcare providers consulting PMP; 2) creating a feature that will allow prescribers to set practice specific thresholds for their patient prescribing limits that, when exceeded, will trigger an automatic report to the prescriber; 3) upgrading software to the most up-to-date version that will prevent unauthorized access and disclosure of prescription and dispensing information and will improve the accuracy of PMP data, and 4) adding *ad hoc* enhancements that improve the ability of a prescriber to provide best practice patient care.

<sup>&</sup>lt;sup>8</sup> Maine HealthInfoNet. Participating Healthcare Organizations. <u>http://www.hinfonet.org/about-us/participating-healthcare-organizations</u>

<sup>&</sup>lt;sup>9</sup> Ibid.

As a whole, these additions to the PMP program are intended to lead to a significant improvement in the functionality of Maine's PMP while increasing prescribers' use of the PMP and as a result, improving patient care and reducing prescription drug diversion, abuse, misuse and mortality.

#### **Purpose of this Report**

SAMHS contracted with Hornby Zeller Associates, Inc. (HZA) to conduct a program evaluation of the PMP Expansion and Interoperability grant. The purpose of this evaluation is to assess whether SAMHS has met the objectives of the grant and has completed all the grant requirements.

The Methodology section describes how HZA collected the data for this report, and the section that follows reviews how the PMP Integration Project was implemented in Maine. The Year Two Results section describes the continuation of the implementation of grant activities in year two. The Surveillance section presents the primary data elements that SAMHS monitors to understand the impact of the combined interventions to reduce prescription drug diversion and abuse in Maine. The final section presents a summary of PMP activities and important lessons learned during the two years of the project.

# **METHODOLOGY**

HZA employs an Action Research Model in its evaluations,<sup>10</sup> working closely with PMP Project Integration Coordinator and other PMP staff at SAMHS as they implemented grant activities. The evaluator attended an initial planning meeting with the PMP staff, multiple PMP Advisory Committee meetings, and also met on a monthly basis with the PMP Project Integration Coordinator.

The year-two final evaluation includes results from eleven PMP key stakeholder interviews representing prescribers, dispensers, state licensure boards, pharmacy schools, lobbyists, state PMP policy writers, the PMP Advisory Committee, HID staff, as well as key PMP staff. Also included are analyses of data requests from the PMP system, the Memoranda of Agreement with other states, HID Statements of Understanding about online registration and delegate accounts, and meeting minutes from the PMP Advisory Committee and the Substance Abuse Services Commission, as well as minutes from an *ad hoc* group of representatives from the Maine Licensing Boards, HID and SAMHS staff.

<sup>&</sup>lt;sup>10</sup> Patton, M. Q. (2003). *Utilization-focused evaluation*. Springer Netherlands.

# **DESCRIPTION OF THE PROGRAM**

Maine's PMP Integration Project comprises eight objectives that fall into four categories: create interoperability with other states, create integration with electronic health records, add technology enhancements, and increase use of PMP.

#### Interoperability

# **Objective 1**: Become interoperable with at least eight other state PMPs (including at least two states in New England) by September 2014.

There are no formal national standards for information-sharing and interoperability, and consensus-based national standards are slow to emerge due to the politics surrounding PMP hubs communicating and sharing "their" data. The critical component in PMP interoperability is a national information technology architecture that is designed to permit consistent and secure interstate data sharing. This architecture is the Prescription Monitoring Information Exchange (PMIX) National Architecture.<sup>11</sup> Guiding the PMIX initiative is a steering committee composed of state PMP administrators (of which the project coordinator for this grant is one), non-voting members and alliance partners including hub operators, the Bureau of Justice Assistance (BJA), Integrated Justice Information Systems Institute (IJIS), Training and Technical Assistance Center (T/TAC), and Substance Abuse and Mental Health Services Administration (SAMHSA) in the Department of Health and Human Services (HHS).

Twenty-eight states currently provide a means for sharing data from PMPs. Maine is one of 12 states that require a written agreement to allow reciprocity before PMP data may be released. Maine is one of nine states to require that access to the data or use of the data be consistent with their state laws;<sup>12</sup> this means that interoperability with the Maine PMP is limited to states where a written agreement of reciprocity is in place that is consistent with Maine's law with regards to the PMP.

Data sharing<sup>13</sup> can occur in two ways: 1) direct state-to-state flow of information, or 2) through interstate PMP data hubs. Currently, there are three PMP hubs: RxSentry Prescription Monitoring Program (a proprietary system for prescription monitoring provided by Health Information Designs), RxCheck Hub (now hosted by Integrated Justice Information Systems for the RxCheck Governance Committee), and the PMPInterconnect Hub (hosted by the National Association of Boards of Pharmacy).

<sup>&</sup>lt;sup>11</sup> Finklea, K.M., Bagalman, E. & Sacco, L. (2013). Prescription Drug Monitoring Programs. Congressional Research Services. Available at <u>http://www.fas.org/sgp/crs/misc/R42593.pdf</u>

<sup>&</sup>lt;sup>12</sup> The other states requiring a written agreement or reciprocity are Illinois, Indiana, Kansas, Kentucky, Massachusetts, Mississippi, Nevada, New Jersey, New York, Ohio, and Virginia. The other states requiring consistent state laws are Arkansas, Illinois, Mississippi, Maryland, Montana, Nevada, North Dakota and Oregon.

<sup>&</sup>lt;sup>13</sup> National Alliance for Interstate Drug Laws. (2011). *Interstate Sharing Of Prescription Monitoring Database Information.* Available at <u>http://www.namsdl.org/library/2BA908DC-1372-636C-DD0EDA3313BE8CF8/</u>

Maine uses HID as its PMP software vendor. It is important to note that HID separately operates RxSentry, a proprietary system for PMP interstate data sharing; however, to date, RxSentry is not *actively* operating as a PMP data-sharing hub. As a result, Maine uses the RxCheck PMP data-sharing hub as its multistate data-sharing hub.

RxCheck is a federally funded PMIX Architecture compliant hub. Maine's PMP system links with the RxCheck hub, thereby creating potentially technologically simple state-to-state data-sharing opportunities. However, to establish interstate data sharing, a PMP must first have at least one other state to serve as an exchange partner, legislation in place that enables the state to engage in interstate interoperability, and a Memorandum of Understanding (MOU) governing data sharing among the partners.

#### Integration

**Objective 2:** Link PMP and electronic health records (EHRs) via the health information exchange (HIE) serving at least one EHR in a pharmacy, emergency department and primary care office by October 2013.

Activities to develop PMIX occur in the rapidly changing landscape of health care information technology, which includes the development and expansion of state health information exchanges (HIEs). One way to increase use of PMPs is to integrate access to PMP data into clinical workflow in the primary care office or hospital setting.<sup>14</sup> This can be done by leveraging the existing state health information exchange hub, Health InfoNet (HIN), and linking healthcare providers who already use the hub by creating a single sign-on process to the hub and the PMP. "One click" access to the PMP for providers would connect them to medical records for patients in all of Maine's 37 hospitals and hundreds of primary care practices that participate in HIE state hub. This single sign-on process would make use of the PMP more efficient and feasible for providers, given their time constraints during a patient's appointment.

#### **Technology Enhancements**

#### **Objective 3:** Adopt the ASAP 4.2 Standard for Prescription Monitoring Programs.

The American Society for Automation in Pharmacy (ASAP) has created standards for connectivity to PMPs, and ASAP 4.2 is the most recent version of the ASAP software. The PMP Integration Project enhancement to adopt ASAP 4.2 applies to Maine's PMP vendor, HID, as well as all data submitters (licensed pharmacies in Maine), who are required to use ASAP 4.2 software when submitting their data to HID.

<sup>&</sup>lt;sup>14</sup> MITRE Corporation. (2012). *Enhancing Access to Prescription Drug Monitoring Programs Using Health Information Technology: Work Group Recommendations.* Office of the National Coordinator for Health Information Technology, in partnership with SAMHSA.

#### **Objective 4:** Allow prescribers to set their own levels for patient drug monitoring.

At the end of this project, the goal is to have created and implemented an enhancement that allows for prescribers to override the state notification threshold for the number of prescribers and the number of pharmacies a patient can visit in a quarter. Other enhancements include the addition of an automatic report that lets prescribers set their own levels for patient drug monitoring based on additional parameters.

#### **Use of PMP**

# **Objective 5:** Increase the percentage of licensed physicians registered with the PMP to 90 percent by January 2014.

In 2012, the Maine Legislature enacted a law that required all health care providers in six classes of providers to register for PMP by March 1, 2014 if 90 percent of prescribers in each class had not registered by January 1, 2014.<sup>15</sup> (The six classes of prescribers are allopathic physicians, doctors of osteopathy, dentists, podiatrists, physician assistants and advanced practice registered nurses.)

In 2012, Maine prescribers registered to the PMP by sending a paper registration form with original signatures through the mail. PMP staff verified that the provider license was active and the provider was in good standing, they then approved the registration and faxed the approved form to the PMP software vendor, HID. PMP staff then entered this registration information into a master spreadsheet for internal use. HID processed the registration and emailed the prescriber a link to the PMP web portal, a user name, and a password. This enhancement's purpose is to create a more streamlined approach to PMP registration, moving away from a manual process to an electronic process.

# **Objective 6:** Increase by 10 percent the number of providers requesting patient reports (solicited reports).

Solicited reports are those that a PMP user requests from the PMP on a specific patient. Currently, PMP utilization is measured using the *count* of solicited reports in the PMP system. This is based on the assumption that if providers are requesting patient reports, they are using the system. With the previous enhancements in place, the expectation is that there should be an increase in solicited requests for patient reports from users of the PMP system.

<sup>&</sup>lt;sup>15</sup> Maine Revised Statute Title 22, Chapter 1603: Controlled Substances Prescription Monitoring. Available at <u>http://www.mainelegislature.org/legis/statutes/22/title22ch1603.pdf</u>

#### **Objective 7:** Decrease by five percent the number of unsolicited Patient Threshold Reports sent to providers

Unsolicited reports are automatically generated reports that are sent out when a specific patient passes certain thresholds programmed into the system. A decrease in the number of these reports is expected when providers are effectively using the PMP and actively monitoring their patients.

# **Objective 8:** Increase the number of referrals made to substance abuse treatment providers due to providers viewing PMP data

As more healthcare providers use PMP, it was anticipated that there would be increased knowledge about patient behavior, including prescription drug diversion and abuse. There were several anticipated changes in healthcare provider behavior. One was that the PMP data would help providers identify more patients in need of substance abuse treatment. Another was that the PMP would create a mechanism to track referrals made as a result of a prescriber consulting the PMP, and would enable SAMHS to examine potential impact this program might have on treatment referrals. Data on referrals are available in the Treatment Data System (TDS). All Maine Licensed Substance abuse treatment agencies enter treatment data into TDS which includes data on the primary referral source.

# **RESULTS / DISCUSSION**

This project has been implemented in a rapidly changing healthcare environment. Technological advances and changes in legal interstate agreements have affected the pace of efforts to build interoperability. Furthermore, legislative changes requiring registration of six provider types aided in narrowing the gap between unregistered and registered healthcare providers. Healthcare provider education about the PMP and the increased awareness among providers of prescription drug diversion may be leading to changes in the way prescribers use the PMP. This environment presented opportunities and challenges for SAMHS as it implemented the PMP Integration Project.

#### Interoperability

SAMHS's goal of implementing interstate data sharing with at least eight other states by September 2014 was not attained. In the first year of this grant, physician and pharmacy representatives interviewed strongly supported interoperability as a way to improve patient care. Many patients travel across state lines, including many "snow birds," retired individuals who live in Maine in the summer and in Florida during the winter. Florida has recently passed laws that address the "pill mills" and the distribution and selling of opioids in the state and across state lines. However, Florida does not have legislation that allows for interstate sharing of PMP data.

In addition, New Hampshire (the only state bordering Maine) just recently enacted PMP legislation itself; however, the legislation has no provisions for interstate data sharing. Interviews with key stakeholders in year two of this project highlighted the interest and need for interstate data sharing with New Hampshire. Prescribers were particularly interested in patients who were escaping the notice of the Maine PMP thresholds by accessing pharmacies in New Hampshire or other New England states. In general, Maine views interstate data sharing as a process that allows for greater transparency in prescribing and dispensing practices across state lines and allows for greater ability to impact opioid misuse and abuse in Maine.

In the first year of the grant, discussions began with PMP officials in Connecticut, Washington, Vermont, Massachusetts, Kentucky, Florida, South Carolina, and New Jersey. As of September 30, 2014, a signed Memoranda of Understanding (MOU) was in place with Alabama and Kentucky, and data sharing has been successful. Currently the RxCheck state-to-hub MOU was signed by the Maine Commissioner's office on December 10<sup>th</sup>, 2014. The signing of this MOU means that Maine will have the potential to connect and be interoperable with 11 additional states. Currently, of these states, Massachusetts and Oklahoma are the only other states that are capable of sharing data, as they have signed the state-to-hub MOU necessary for this to take place. Importantly, with our own state-to-hub MOU in place, Maine began testing in mid-December with Massachusetts PMP data. Following testing of Massachusetts data, the next state to be brought on will be Oklahoma.

Table 1 outlines the progress Maine has made in the past two years towards the signing of state-to-state MOUs and state-to-hub MOUs.

| Table 1: PMP Interoperability 2012 - 2014                              |   |    |    |    |    |  |  |  |  |
|--|---|----|----|----|----|--|--|--|--|
| 9/30/13 12/31/13 3/31/14 6/30/14 10/1/201<br>Baseline                  |   |    |    |    |    |  |  |  |  |
| Number of states that have interoperability with Maine                 | 0 | 1  | 1  | 1  | 2* |  |  |  |  |
| Number of MOUs either <i>in process</i> or<br>signed with other states | 0 | 23 | 49 | 49 | 49 |  |  |  |  |

\*testing has been scheduled for interoperability with two additional states (MA and OK) with the signing of the RxCheck state-to-hub MOU. If testing is successful there could potentially be two additional states having interoperability with ME by early spring 2015.

Year two interviewees highlighted that that the main challenge to interstate data sharing is whether there is legislation in a state that allows for PMP data sharing (including differences in who is allowed to access the PMP). For Maine, the challenges are made a little more complicated as Maine's PMP software vendor is operated by a separate governing body than its PMP interoperability hub, RxCheck. The governing body of RxCheck recently came to an agreement with PMPInterconnect, the other active PMP hub, to develop legal agreements to test the sharing of data between the two hubs. Currently RxSentry, the unofficial third PMP hub, is a private PMP hub that, to date, has not agreed to share PMP data, and maintains proprietary ownership of this hub. While the PMIX architecture is in place in all three hubs, currently there are no positive or negative incentives in place that would precipitate RxSentry to participate in the hub system and share its data with other hubs. As one might expect, this has created many barriers in interoperability between states. Interviews with the Project Coordinator and Maine's PMP software vendor indicate that while there have been meetings and some progress made during discussions between PMP hubs, progress towards interoperability is slow and remains a politically charged issue.

Over the grant period, SAMHS has worked diligently to pursue interoperability through bilateral agreements with individual states and through RxCheck for interoperability on a state-by-state and state-to-hub basis with other states that use this PMP hub. SAMHS has experienced an unforeseen barrier in pursuing interoperability: achieving interoperability with eight other states rests heavily on PMP legislation in other states to allow for interstate data sharing as well as similar legal agreements with RxSentry and RxCheck.

As such, the Project Coordinator identified early in the project that the most efficient process for implementing interoperability was: 1) to work on signed agreements with states that also use RxSentry as their PMP vendor; 2) to work on signed agreements with individual states that also use RxCheck as the PMP hub; 3) to pursue the signing of a state-to-hub memorandum of agreement with Maine and RxCheck that would allow for Maine to share PMP data through the RxCheck hub without having to sign an MOU with each specific state that uses RxCheck; and 4) to pursue RxSentry state-to-hub MOU processes. Interviews conducted with HID staff and Maine's PMP staff during the second year of this grant, specified that the best path towards enabling future interoperability between states, given this complicated and politically charged environment, would be to have the federal government *incentivize* communication between the PMP hubs.

Key stakeholder interviews conducted with prescribers, dispensers, presidents of the Medical, Osteopathic, and Pharmaceutical Associations, as well as all of the pertinent licensing boards highlighted the fact that, for Maine, interoperability would be most useful when set up between neighboring New England states as well as Florida, where many Maine residents spend time during the winter months. While these key stakeholders are encouraged to see the progress made in interoperability, they indicated that viewing Alabama and Kentucky's PMP data is just not relevant to the care of their patients. In addition, they felt strongly that a future PMP enhancement that allowed for single sign-on to all accessible interstate PMP data at once would greatly improve the efficiency of the PMP portal. Currently PMP users have to view each state's PMP data via separate tabs, which can be a barrier to use for some prescribers, given their time constraints.

### Integration

PMP data and electronic health record integration through Maine's HIE occurred in 2014. This single sign-on process offers health care providers throughout Maine easier access to comprehensive patient data, providing effective and efficient patient care. Waiting for HID to be able to implement this request took a year, due to a delay on HID's side from unanticipated internal workload and reorganization. Staff at SAMHS, HID, and HIN continued to work hard to align the systems and on April 10th, 2014 the PMP became accessible directly from the HIN clinical portal via a single sign-on process.

This process allows HIN users to bypass the entire PMP login process and launch directly from the HIN clinical portal to the PMP Practitioner/Pharmacist query portal patient site. It is important to note, however, that prescribers, dispensers and their delegates who are interested in using this feature must register to use both the PMP and HIN and make a request via HIN or the PMP to sign up for this feature. A PowerPoint presentation showing how to use this feature can be found on the PMP website in the resource link under promoting the Prescription Monitoring Program:

http://www.maine.gov/dhhs/samhs/osa/data/pmp/resources.htm

When asked about this feature in interviews conducted with prescribers who use this tool on the HIN clinical portal, there were no negative reviews and all PMP users stated that they appreciated the time it saves them while increasing their ability to provide effective care to their patients.

### **Technology Enhancements**

In year one of this program, HID completed the software upgrade to ASAP 4.2 successfully, and data submitters are using ASAP 4.2 as required. Software upgrades helped to ensure that gross formatting errors in identification numbers, National Drug Codes, and other data were minimized. Interviews conducted with PMP administrators indicated that few barriers were encountered while upgrading and in using this software. Small barriers occurred for independent pharmacies whose capacity to change their PMP uploading software to align with ASAP 4.2 was limited. These pharmacies were granted a waiver on uploading their data for a few weeks, during which time they brought their systems up to capacity. This occurred only on a very short-term basis.

On January 15, 2014 the PMP redesign to the pharmacist/provider web-portal went live. This redesign enabled pharmacists and providers and their delegates to retrieve passwords electronically, change personal account information on file and allow for a check of PMP use by prescribers and their delegates. After the redesign was completed, PowerPoint tutorials were posted to the PMP resource link that explain and assist health care professionals in making use of the PMP database and its resources.

The Maine PMP currently can generate two types of reports: 1) Unsolicited Patient Threshold Reports, and 2) Solicited Patient Reports. The Unsolicited Patient Threshold Report is an automatically generated monthly report on an individual patient who has reached or exceeded certain state-set thresholds. The report is sent automatically to any healthcare provider who has written a prescription which was subsequently dispensed by a pharmacy for a patient. SAMHS set the thresholds based upon expert opinion of appropriate best-practice parameters to indicate potential prescription drug diversion or potentially dangerous drug interactions.

In addition, as of September 2014, a new PMP management tool became available to prescribers, allowing them to set their own practice threshold for number of prescribers and number of pharmacies from which their patients can receive a schedule II–IV controlled substance. By choosing a numeric threshold value for both the number of prescribers and the number of pharmacies, a prescriber will receive an email notice on or around the 7<sup>th</sup> of each month.

Currently, this enhancement allows the prescribers either to relax or to tighten the bestpractice threshold default limits that are set by Maine's PMP that generate unsolicited threshold reports. At this time, some doctors are using this enhancement to relax, in some cases significantly, the default limits. This enhancement was intended to allow prescribers to tighten the PMP default to monitor patients more effectively, and as such, the PMP might consider reformatting this enhancement so that the default thresholds can only be tightened, not relaxed. In the end of December 2014, two new unsolicited threshold reports will be issued to prescribers. Email notification will be sent by the PMP vendor to a prescriber when:

- 1) A patient has received multiple overlapping opioid prescriptions.
- 2) A patient exceeds a daily morphine milligram equivalent of 100.

Responses to the survey conducted in the first year of this project indicated that prescribers felt that the above notices would provide them with more relevant information that would subsequently help them to understand whether their patients were misusing or abusing schedule II–IV prescription drugs. As such, these notices are intended to help reduce prescription drug misuse and overdose by alerting the prescriber when certain, medically important limits have been surpassed.

## **Use of PMP**

In 2013, the legislature passed a Resolve, directing the Substance Abuse Services Commission to create a process to make PMP registration easier than the current system. SAMHS did not anticipate that 90 percent of healthcare providers in each class would register in time and therefore started to plan for a significant increase in registration requests in February 2014 to meet the March 1, 2014 deadline. As anticipated, the legislated goal of having 90 percent of prescribers in Maine registered to the PMP by January of 2014 was not met.

As a result, all licensed individuals in the six required disciplines were required to register by March 1, 2014. This legislation was then repealed upon the passage of new legislation (LD1840) which was passed on April 30<sup>th</sup>, 2014. The new legislation requires registration at the time of licensure or renewal of licensure for individuals prescribing schedule II-IV controlled substances; it was not effective until August 1, 2014.

To meet this statute the PMP worked with the licensure boards and the PMP vendor to create an automated process for enrolling prescribers of controlled substances when they apply for or renew their professional license. SAMHS staff met with representatives from the Licensing Boards, HID, and the Agency Licensing Management System (ALMS), the software vendor for the Licensing Boards, to discuss options.

Since May, 2014 per L.D. 1840 22 M.R.S. § 7249(5), the PMP has been working with licensure boards to automatically enroll prescribers of controlled substances when they apply for or renew their professional license. By the end of March 2015, the PMP expects automatic registration of prescribers and online registration for delegates to begin. Automatic prescriber registration will occur through a data transfer from the Agency Licensing Management System (ALMS) to the PMP vendor.

Automatic activation of PMP registrations for prescribers will occur when:

- 1) the licensee DEA number is provided;
- the email address for the licensee is provided (for delivery of log-in and password information); and
- 3) the medical license status of the licensee is active.

Automatic deactivation of registered licensees will occur when a licensee no longer holds an active license.

Table 2 shows an overall steady increase in the number prescribers, sub-accounts, PMP users, and pharmacies accessing PMP over the grant period, although the number of registered prescribers and the number of PMP users fell somewhat in the fourth quarter due to licensing boards updating expired licensure data and transmitting it to the PMP vendor.

The number of PMP users includes registered prescribers and sub-accounts, which are accounts that registered prescribers may assign to staff who work for them. Typically, the sub-account holder is a licensed health care professional such as a Registered Nurse or Medical Assistant. Note that an "active PMP user" is a user who has logged into the PMP pharmacy/provider query tool and solicited patient reports.

| Table 2: PMP Registered and Active Users 2012–2014  |                     |                |               |               |               |  |  |  |  |
|---|---------------------|----------------|---------------|---------------|---------------|--|--|--|--|
|   | Baseline<br>9/30/12 | Q1<br>12/31/13 | Q2<br>3/30/14 | Q3<br>6/30/14 | Q4<br>9/30/14 |  |  |  |  |
| Number of registered prescribers in<br>Maine  | 3,043               | 4,374          | 6,148         | 6,256         | 6,271         |  |  |  |  |
| Number of sub-accounts  | 1,172               | 2,057          | 2,218         | 2,341         | 2,566         |  |  |  |  |
| Number of unique PMP prescriber and<br>sub-account <i>users</i> (measured by who<br>ran a patient report) | 951                 | 1192           | 2057          | 2096          | 2221          |  |  |  |  |
| Number of pharmacists registered to the PMP   | 225                 | 484            | 612           | 647           | 729           |  |  |  |  |
| Number of pharmacies that reported Rx data within 90 days to the PMP                                      | 357                 | 396            | 399           | 404           | 413           |  |  |  |  |
| Total out-of-state prescribers registered to use Maine's PMP  | 56                  | 88             | 768           | 838           | 848           |  |  |  |  |

Over the period of this grant, PMP registration and PMP use have more than doubled. Note that currently only one quarter of registered prescribers and delegates (2221 out of 8837) are actually using the PMP system. Key stakeholder interviews conducted at the end of the second year of this project, indicated that prescribers and current users of the PMP agree that the only effective way to increase use of PMP is through education of registered prescribers about PMP's effectiveness as a tool for treating their patients. When asked about whether the state should mandate use of the PMP for certain medical situations, prescribers uniformly thought not. Key stakeholders felt strongly that a PMP that was easy to use, navigate, and understand was already an effective enough tool for quality and best-practice patient care. Prescribers said they and others only needed to be educated on availability and use of the PMP.

To address this issue, PMP staff is working with various organizations to hold education trainings and workshops throughout Maine on effective use of the PMP in healthcare settings. As part of this educational campaign, Maine Medical Association (MMA) has been contracted to provide prescriber education trainings throughout Maine advocating the use of the PMP to healthcare professionals.

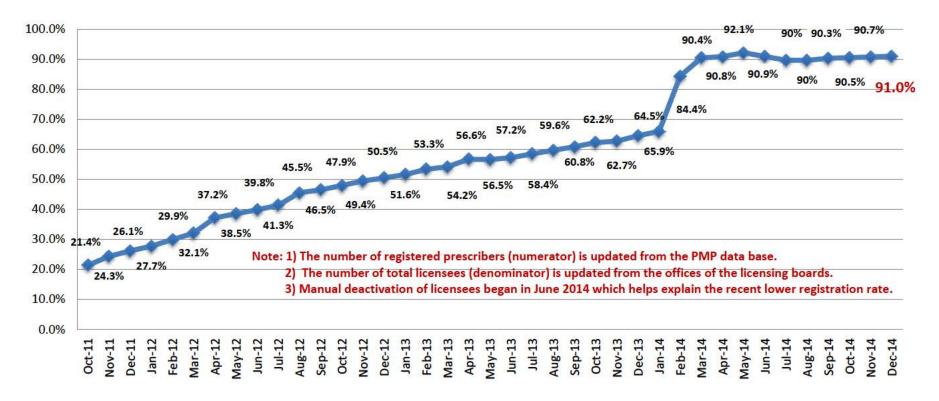
Over the period of this grant, PMP registration and PMP use have more than doubled.

Figure 1 on the following page (provided by the Maine PMP) identifies the increase in total prescriber registration over the period of this grant. Note the rapid increase leading up to the time when mandated registration was enacted in March of 2014.

Dista

#### Figure 1.\*

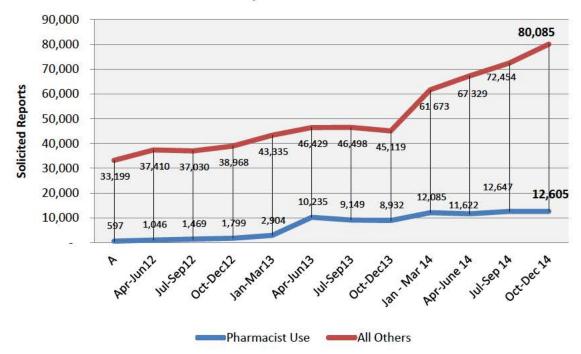
## ME PMP Prescriber Registration Through December 2014



\*Courtesy of the Coordinator of the Maine PMP.

Figure 2, also provided by the Maine PMP, shows the total number of solicited reports by prescriber classes. This is used as a proxy for prescriber use of the PMP. The number of solicited reports has doubled since the baseline measurement for this project. This can be attributed to several factors that influence rates of providers using the PMP, including: 1) education of registered providers on PMP use and effective patient care, 2) changes in medical practice policies with regarding required consultation of the PMP before prescribing Schedule II-IV drugs, 3) user-friendly changes made to the PMP causing registered providers to use it more frequently, as well as 4) possible improvement in patient care; as prescribers become more aware of prescription drug abuse and diversion and consult the PMP to access additional information about a patient's prescription history they request more reports on patients they are monitoring.

The significant increase in pharmacist requests for patient reports in the third quarter of the grant (April–June 2013) is the result of a new policy at Walgreen's pharmacies, whereby pharmacists have been instructed to consult the PMP when verifying prescriptions for controlled substances in addition to other verification strategies (such as requesting photo identification of the person receiving the prescription).



#### Figure 2\*

Total PMP Reports Utilized 2012-2014

\*Courtesy of the Coordinator of the Maine PMP.

Table 3 shows the number and type of PMP reports requested (solicited reports) by prescribers, sub-account holders, pharmacists, and out-of-state prescribers. An increase in the number of reports requested can be seen as a proxy for improvement in patient care, as prescribers become more aware of prescription drug abuse and diversion and consult the PMP to access additional information about a patient's prescription history. The significant uptick in pharmacist requests for patient reports in the third quarter of the grant (April–June 2013) is also the result of the new policy at Walgreen's pharmacies.

| Table 3: PMP Reports 2012–2014  |                     |                |               |               |               |  |  |  |  |
|---|---------------------|----------------|---------------|---------------|---------------|--|--|--|--|
|   | Baseline<br>9/30/12 | Q1<br>12/31/13 | Q2<br>3/31/14 | Q3<br>6/30/14 | Q4<br>9/30/14 |  |  |  |  |
| Number of reports <i>requested</i> by<br>prescribers and sub-accounts | 37,030              | 45,119         | 61,673        | 67,329        | 72,454        |  |  |  |  |
| Number of reports requested by pharmacies                             | 1,469               | 8,932          | 12,085        | 11,622        | 12,647        |  |  |  |  |
| Number of reports requested by out-of-<br>state prescribers           | 46                  | 35             | 15            | 228           | 128           |  |  |  |  |

Table 4 shows the number of unsolicited Patient Threshold Reports generated. A decrease in the number of patient threshold reports that are automatically sent to prescribers can be seen as a positive indicator of improved patient care, as fewer patients reaching thresholds may indicate a possible reduction in abuse or diversion, less harmful drug interaction, and/or overprescribing. The number of Unsolicited Patient Threshold Reports decreased over the course of the grant, potentially indicating prescribers are using the PMP in ways that are helping to positively impact effective patient care. However, this decrease is not yet substantial enough to be able to make this a solid conclusion.

| Table 4: PMP Patient Threshold Reports 2012–2014                             |                     |                |               |               |               |  |  |  |  |
|--|---------------------|----------------|---------------|---------------|---------------|--|--|--|--|
|  | Baseline<br>9/30/12 | Q1<br>12/31/13 | Q2<br>3/31/14 | Q3<br>6/30/14 | Q4<br>9/30/14 |  |  |  |  |
| Total number of unsolicited reports generated                                | 778                 | 756            | 919           | 649           | 759           |  |  |  |  |
| Number of prescribers who set own threshold levels (effective June 19, 2014) | N/A                 | N/A            | N/A           | N/A           | 58            |  |  |  |  |

Table 5 summarizes progress toward grant objectives. Completion of most of the grant objectives will occur in the spring of 2015 during the one year no-cost extension that was given to SAMHS, which ends September 1<sup>st</sup>, 2015.

|  | Target                 | Actual<br>9/2013 | Progress 9/2013    | Actual 9/2014      |
|--|------------------------|------------------|--------------------|--------------------|
| Objective 1: Become interoperable with at least eight other state  |                        |                  |                    |                    |
| PMPs (including at least two states in New England) by September   |                        |                  |                    | 2*                 |
| 2014   | 8                      | 2                | Partially attained | Partially Attained |
| Objective 2: Connect PMP and electronic health records (EHRs) via  |                        |                  |                    |                    |
| the health information exchange serving at least one EHR in a      | 1 pharmacy             | 1                | Attained           | 1                  |
| pharmacy, emergency department and primary care office by          | 1 emergency department | 0                | Did not attain     | 1                  |
| October 2013.  | 1 primary care office  | 0                | Did not attain     | 1                  |
| Objective 3: Adopt the ASAP 4.2 Standard for Prescription          |                        |                  |                    |                    |
| Monitoring Programs  |                        | Completed        | Attained           | Attained           |
| Objective 4: Allow prescribers to set their own levels for patient |                        | Not              |                    |                    |
| drug monitoring  |                        | completed        | Did not attain     | Attained           |
| Objective 5: Increase percentage of licensed physicians registered |                        | 1                | Partially attained | Attained           |
| with the PMP and HIE to 90% by January 2014                        |                        |                  | Percent of goal    | Percent of goal    |
|  |                        |                  | attained:          | attained:          |
| • MD   |                        | 65.1%            | 72.3%              | 91%                |
| • DO   | 90.0%                  | 62.6%            | 69.6%              | 93%                |
| DPM  | 11/14/07/14/98/1       | 25.7%            | 28.6%              | 76%                |
| PA-C   |                        | 73.8%            | 82.0%              | 94%                |
| CNM  |                        | 38.6%            | 42.9%              | 66%                |
| CNP  |                        | 62.0%            | 75.6%              | 86%                |
| Objective 6: Increase by 10% the number of providers and           |                        |                  |                    |                    |
| subaccounts requesting patient reports (PMP Users)                 | 1639                   |                  | Attained           | Attained           |
| Objective 7: Decrease by five percent the number of Unsolicited    |                        |                  |                    |                    |
| Patient Threshold Reports generated by the PMP system              | 740                    | 759              | Did not attain     | Did not attain     |
| Objective 8: Increase number of referrals made to substance abuse  | Not                    | Not              | Attained           | Attained           |
| treatment providers due to providers viewing PMP data              | available              |                  | 13                 | 21                 |

\*Two more states' PMP data are in the process of being tested. Maine should be interoperable with these states by January 2015.

Source data are as of November 25, 2014 per John Lipovsky, PMP Program Coordinator.

## **SURVEILLANCE**

The PMP Integration Project activities are one of several strategies employed in Maine to decrease prescription drug abuse. SAMHS monitors trends in use of alcohol, prescription drugs, and other drugs to detect emerging trends and to monitor the impact of the combined interventions to reduce drug abuse in Maine.

Table 6 shows some of the indicators SAMHS uses to monitor prescription drug use and its consequences. Importantly, the Maine Integrated Youth Health Survey (MIYHS) indicates that lifetime misuse of prescription drugs among high school aged youth has declined from 18 percent in 2009 to 12 percent in 2013. MIYHS also indicates that past month misuse of prescription drugs among high school students has decreased from nine percent in 2009 to 5.6 percent in 2013. However, the National Survey on Drug Use and Health (NSDUH) indicates that among 12-17 year olds in Maine past year nonmedical pain reliever use has remained relatively stable at roughly six percent. In addition, the Behavioral Risk Factor Surveillance System found that, among 18–25 year olds in Maine, a potential downward trend in lifetime misuse of prescription drug from 2011 to 2012 (6.2 percent to 4.3 percent). However, this same survey indicates that, among the 18 and older population, an increase in lifetime misuse of prescription drugs from 2011 to 2012 (2.8 percent to 3.5 percent).

Another surveillance indicator, the Northern New England Poison Control, has had a decrease of roughly 6,450 calls received involving opioids from 2011 to 2013. This indicator does not distinguish between pharmaceutical forms of opioid and non-pharmaceutical forms of opioids. Also, of importance, Emergency Medical Services (EMS) data for Maine indicate that among all age groups, there has been more than a two-fold response in number of emergency medical responses related to drug / medication overdose from 2011 to 2013. Again, EMS does not distinguish between prescription drugs versus non-prescription drugs in these data. Finally, the Treatment Data System also shows a decrease in number of treatment admissions due to synthetic opioids from 2011 to 2013 (4085 individuals to 3681 individuals).

It is possible that a the combined impact of several interventions targeting prescription drug misuse, abuse and overdose are slowly being reflected in the data, however, there is a plethora of evidence also showing that as prescription drug misuse declines, heroin use is on the rise and this will most likely be reflected in future surveillance data.

| Source | Indicator  | Year(s)           | 12    | High   | Under            | 18     | 26 and | 18 and             | All                 |
|--------|--|-------------------|-------|--------|------------------|--------|--------|--------------------|---------------------|
| oource | indicator  | Teal(5)           | to 17 | School | 18               | to 25  | older  | older              | ages                |
| MIYHS  | Past month misuse of   | 2009              |       | 9.0%   |                  |        |        |                    |                     |
|        | prescription drugs   | 2011              |       | 7.1%   |                  |        |        |                    |                     |
|        |  | 2013              |       | 5.6%   |                  |        |        |                    |                     |
|        | Lifetime misuse of   | 2009              |       | 18%    |                  |        |        |                    |                     |
|        | prescription drugs   | 2011              |       | 15%    |                  |        |        |                    |                     |
|        |  | 2013              |       | 12%    |                  |        |        |                    |                     |
| NSDUH  | Past Year Nonmedical   | 2006-08           | 6.00% |        |                  | 13.80% | 3.00%  | <mark>4.40%</mark> |                     |
|        | Pain Reliever Use  | 2010-11           | 5.70% |        | i.               | 11.30% | 2.95%  | 4.01%              |                     |
|        |  | 2011-12           | 5.9%  |        |                  | 10.98% | 3.43%  | 4.37%              |                     |
| BRFSS  | Lifetime misuse of   | 2011              |       |        | e                | 6.10%  |        | 2.80%              |                     |
|        | prescription drugs   | 2012              |       |        |                  | 4.30%  |        | 3.50%              |                     |
| EMS    | Number of Emergency  | 2011              |       |        | <mark>161</mark> | 211    | 992    | 1203               | 1,364               |
|        | Medical Responses<br>related to drug/<br>medication overdose             | 2012              |       |        | 252              | 289    | 1412   | 1701               | 1,953               |
|        |  | 2013              |       |        | 289              | 407    | 2,087  | 2494               | 2,819               |
|        | EMS responses<br>related to drug/<br>medication overdose<br>by age group | 2011              |       |        | 12%              | 15%    | 73%    | 88%                |                     |
|        |  | 2012              |       |        | 13%              | 15%    | 72%    | 85%                |                     |
|        |  | 2013              |       |        | 10%              | 14%    | 74%    | 89%                |                     |
| NNEPC  | Number of calls  | 2011              |       |        |                  |        |        |                    | 13,899              |
|        | received involving   | 2012              |       |        |                  |        |        |                    | 10,720              |
|        | opioids  | 2013              |       |        |                  |        |        |                    | 7,451               |
| OCME   | Number of deaths due   | 2010              |       |        |                  |        |        |                    | 161                 |
|        | to pharmaceuticals   | 2011              |       |        |                  |        |        |                    | 140                 |
|        |  | 2012              |       |        |                  |        |        |                    | 140                 |
| MHDO*  | Number of outpatient   | 2010              |       |        |                  |        |        |                    | 42,820              |
|        | hospital visits due to<br>abuse of opiates                               | 2011              |       |        |                  |        |        |                    | <mark>39,914</mark> |
|        | Number of outpatient   | 2010              |       |        |                  |        |        |                    | 353                 |
|        | hospital visits due to   | 2011              |       |        |                  |        |        |                    | 377                 |
|        | poisoning from<br>opiates  |                   |       |        |                  |        |        |                    |                     |
|        | Number of inpatient  | 2010              |       |        |                  |        |        |                    | 3,509               |
|        | hospital visits due to<br>abuse of opiates                               | 2011              |       |        |                  |        |        |                    | <mark>3,61</mark> 9 |
|        | Number of inpatient  | 2010              |       |        |                  |        |        |                    | 303                 |
|        | hospital visits due to   | 2011              |       |        |                  |        |        |                    | 288                 |
|        | poisoning from<br>opiates  | and Substituted S |       |        |                  |        |        |                    |                     |

| Table 6: Indicators Used to Track Consequences of Prescription Drug Use |   |         |             |                |             |             |              |                 |                    |
|---|---|---------|-------------|----------------|-------------|-------------|--------------|-----------------|--------------------|
| Source  | Indicator   | Year(s) | 12<br>to 17 | High<br>School | Under<br>18 | 18<br>to 25 | 26 and older | 18 and<br>older | <u>All</u><br>ages |
| TDS   | Number of primary<br>treatment admissions<br>due to synthetic | 2011    |             |                |             |             |              |                 | 4,085              |
|   |   | 2012    |             |                |             |             |              |                 | 3,838              |
|   | opioids   | 2013    |             |                |             |             |              |                 | 3,681              |

\*MHDO currently does not have reliable 2012 outpatient hospital data.

#### **Data Sources**

Maine Integrated Youth Health Survey (MIYHS). The MIYHS is a statewide survey administered biennially through a collaborative partnership by the Maine Office of Substance Abuse and Mental Health Services (SAMHS) the Maine Center for Disease Control and Prevention and the Maine department of Education to students in grades 5 through 12. The survey collects information on student substance use, risk factors related to substance use, as well as consequences, perceptions and social risk factors related to substances; it also collects information on many other health factors. As of the date of this report, the most recent data available are from 2011.

Maine Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a national survey administered on an ongoing basis by the National Centers for Disease Control and Prevention (CDC) to adults in all 50 states and several districts and territories. The instrument collects data on adult risk behaviors, including alcohol abuse. The most recent data available are from 2011. Note: Due to methodological changes in weighting and sampling, 2011 BRFSS data cannot be trended with previous BRFSS years and considered a baseline year.

National Survey on Drug Use and Health (NSDUH). The NSDUH is a national survey administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) to youth grades 6 through 12 and adults ages 18 and up. The instrument collects information on substance use and health at the national, regional and state levels. Available at https://nsduhweb.rti.org/

Maine Emergency Medical Services (EMS). Maine EMS is a bureau within the Maine Department of Public Safety (DPS) and is responsible for the coordination and integration of all state activities concerning Emergency Medical Services and the overall planning, evaluation, coordination, facilitation and regulation of EMS systems. EMS collects data statewide from the 272 licensed ambulance and non-transporting services.

Northern New England Poison Center (NNEPC). The NNEPC provides services to Maine, New Hampshire, and Vermont. A poisoning case represents a single individual's contact with a potentially toxic substance. NNEPC also collects detailed data on calls requesting the verification of medications. The opioid category includes Oxycodone, Hydrocodone,

buprenorphine, methadone, tramadol, morphine, propoxyphene, codeine, hydromorphone, stomach opioids, Meperidine (Demerol<sup>®</sup>), heroin, Fentanyl<sup>®</sup>, and other/unknown opioids. Data available from the poison center are reported on a continual daily basis and are included through December 2012. These data are only reflective of cases in which the Poison Center was contacted.

*Maine Office of Chief Medical Examiner* (OCME). The Maine Office of the Chief Medical Examiner maintains records of all deaths associated with drug overdose. The death data are compiled on an annual basis and must be finalized prior to release, and so are not available to track changes that may occur over shorter time frames.

*Maine Health Data Organization* (MHDO). MHDO data includes all inpatient admissions to all hospitals in Maine for calendar year 2009. Data categories created by the authors include alcohol, opioids, illegal drugs, and pharmaceuticals. All drug categories include intoxication, abuse, dependence, and poisoning cases related to the drug. The opioid category includes methadone, heroin, and opiates. The illegal drug category includes crack/cocaine, cannabis, and hallucinogens. The pharmaceuticals category includes all other non-opioid medications (including stimulants and depressants). Data are compiled annually and are therefore not available on a more frequent basis.

*Maine Treatment Data System* (TDS). TDS is a statewide database that includes information about clients admitted to treatment in OSA-funded facilities through December 2012. Analyses in this report are based on clients' reported primary, secondary and tertiary drug(s) of choice as well as other demographic and background information that is collected at intake. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, synthetic opiates, methadone/buprenorphine and benzodiazepines.

### **FINAL SUMMARY**

At the end of year two, SAMHS has fully attained six out of the eight project objectives. The two that have been partially obtained are: Objective 1: become interoperable with at least eight other state PMPs (including at least two states in New England) by September 2014, and Objective 7: decrease by five percent the number of Unsolicited Patient Threshold Reports generated by the PMP system. SAMHS was granted a one-year no-cost extension for this project, during which activities will be focused on attaining objectives one and seven. However, given the legislative and time constraints it will not be possible to reach the goal of achieving interoperability in eight states including four in New England. As suggested in the recommendations below, SAMHS should focus on achieving interoperability with New Hampshire, as that will have the greatest impact on Maine residents. Additionally, it should continue to work on healthcare provider education, as well as communication among the various stakeholders.

Overall, this project has been successful in improving real-time access to the PMP through linking the PMP into Maine's HIE, improving the ability of Maine's PMP to reduce the nature, scope, and extent of prescription drug abuse. The project has also been successful in strengthening Maine and other state PMPs that are currently operational by partaking in PMIX committees, pilot projects and advisory groups that have aided in the creation and evolution of the infrastructure and resources that are necessary for interoperability to occur.

As understanding of the prescription drug epidemic continues, Maine's PMP actively evolves in response. The PMP Integration project has been an important part in allowing for dynamic, system wide responses to help Maine prescribers provide best-practice effective care to their patients. Continuing the refinement of Maine's PMP is crucial in decreasing prescription drug misuse, abuse and overdose.

The recommendations below are additional steps SAMHS may wish to consider to maximize the effectiveness of grant funds in the one year no-cost extension and beyond.

# Recommendation 1: Continue to pursue interoperability with neighboring state, New Hampshire

SAMHS should continue to pursue creative options that would help attain interoperability with New Hampshire. While New Hampshire does not currently have legislation in place allowing for interstate PMP data sharing, pursuing a state-to-state MOU might be a more appropriate option, as interstate PMP data is the most relevant to effective patient care when coming from a neighboring state.

#### **Recommendation 2: Continue to offer education and training opportunities**

SAMHS should continue to offer education and training to healthcare providers on how to use the PMP, working in collaboration with groups such as the Maine Medical Association, Healthy Maine Partnerships and other organizations to educate health care

providers and others about the importance of *using* the PMP to effectively treat patients. Continuing this focus will also help achieve the decrease in unsolicited threshold reports needed to achieve objective seven. Education for prescribers on the PMP is of special importance if mandating use is not an action being pursued by SAMHS.

Courses SAMHS should consider developing to offer PMP users:

- 1) **PMP Review Course:** a review course for long-time PMP users showing updates and new tools that the system now offers
- Integrating use of the PMP into standard office protocol: Many practitioners are unaware of the HIN/PMP single sign-on option. Prescribers will appreciate the efficiency and effectiveness of using shared clinical information for patient care.

#### Recommendation 3: Continue to implement user-friendly enhancements to the PMP system

SAMHS should routinely gather feedback from PMP users to keep a finger on the pulse of user-friendly enhancements needed to effectively retain users and draw new users to the system.

# Recommendation 4: Consider reformatting the PMP Prescriber Management Tool so that thresholds can only be tightened, not relaxed

SAMHS might consider reformatting this enhancement, as currently prescribers are able to override state set thresholds by making them less stringent. Any change in this enhancement should limit the direction in which a prescriber can override the threshold to greater stringency, consistent with the original intent.

#### **Recommendation 5: Develop a sustainability plan**

SAMHS should use the one-year no-cost extension to consider developing a long-term sustainability plan for Maine's PMP. The PDMP Training and Technical Assistance Center at Brandeis University has developed a guide on funding options and rationales for state officials.<sup>16</sup> The guide presents options ranging from fees charged to prescribers and dispensers for using the PMP or for prescribing and dispensing controlled substances, to using funds from Medicaid fraud settlement funds, to assessing fees to drug manufacturers based on the sale of their controlled substance in the state.

<sup>&</sup>lt;sup>16</sup> Prescription Drug Monitoring Program Training and Technical Assistance Center. (2013). *Funding Options for Prescription Drug Monitoring Programs.* Technical Assistance Guide No. 04-13. Brandeis University. Available at <a href="http://www.pdmpassist.org/pdf/PDMP\_Funding\_Options\_TAG.pdf">http://www.pdmpassist.org/pdf/PDMP\_Funding\_Options\_TAG.pdf</a>

# **ATTACHMENTS**

### PMP Interview Protocol (Year 2) Dispenser Group December 1, 2014

Interview date: Person interviewed: Person conducting interview:

Thanks for agreeing to talk to me today. I'm with Hornby Zeller Associates, and we are conducting the final evaluation of the PMP Enhancement Grant. I have a few questions regarding how activities and enhancements done in the second year of the grant have potentially affected pharmacies and pharmacists.

- 1. One goal of the grant was to integrate PMP with electronic health records through Maine HealthInfoNet. As of April 10<sup>th</sup>, 2014, PMP users who are also HIN users are able to access PMP data from the HealthInfoNet clinical portal through a single sign-on process. Please describe how this integration has impacted pharmacies and/or pharmacists and how they use the PMP.
- 2. Another goal of the grant is for Maine's PMP to become interoperable with at least 8 states (2 in New England) by September 2014. While we have not been able to attain this goal, Maine does have interoperability with two states: Alabama and Kentucky. Please describe how this interoperability has impacted pharmacists and their use of the PMP data.
- 3. Another grant enhancement activity was to implement a rule change to require "real time" or next business day reporting/uploading of PMP data by the pharmacies. This will be proposed in the legislative session starting in January 2015. Please describe any foreseeable barriers to implementing "real time" reporting i.e. next business day reporting.
- 4. In addition, changing the field that pharmacists fill out from time of dispense to time of sale has been proposed. This change will take effect in March 2015. How do you see this impacting pharmacies or pharmacists regarding use of the PMP? Do you foresee this impacting how many corrections will have to be made to uploaded data?

- 5. Do you have any comments regarding enhancements that have been made through this grant?
- 6. Do you have any suggestions for future enhancements/changes to the PMP and its use?
- 7. Is there anything you would like to add that we haven't covered?

Thank you very much for your time today. Your answers will help us give feedback to SAMHS about how the implementation and effectiveness of the grant and for future effectiveness, efficiency and sustainability of the PMP program.

## PMP Interview Protocol (Year 2) Prescribers (User Group) December 1, 2014

Interview date: Person interviewed: Person conducting interview:

Thanks for agreeing to talk to me today. I'm with Hornby Zeller Associates, and we are conducting an evaluation of the PMP Enhancement Grant. I have a few questions about how activities in the second year of this grant may have affected providers. This interview should take about 20 minutes.

- 1. How frequently do you personally use the PMP portal?
- 2. Have your prescribing practices changed as a result of using the PMP?
- 3. Do you find it to be a useful tool for providing effective patient care?
- 4. One goal of the grant was to integrate PMP with electronic health records through Maine HealthInfoNet. Since April 10<sup>th</sup>, 2014, PMP users who are also HIN users are able to access PMP data from the HealthInfoNet clinical portal through a single sign-on process. However, if you want this service, you must request it in through the HIN portal using the request PMP Access link on the Links Menu. Please describe how this integration has impacted prescribers and how they use the PMP.
- 5. Another goal of the grant is for Maine's PMP to become interoperable with at least 8 states (2 in New England) by September 2014. While this goal has not yet been achieved, Maine does have interoperability with two states: Alabama and Kentucky. Please describe how this interoperability has impacted physicians and how their use of the PMP.
- 6. Another grant enhancement has been to implement a rule change to require "real time" / next business day uploading by the pharmacies of PMP data. This rule change will occur in March 2015. Please describe how access to "real time" data would impact physicians and how they use PMP?
- 7. Another enhancement was to allow prescribers to set their own threshold levels for patient monitoring. Please describe how this might impact physicians and how they use PMP.
- 8. The grant goal of having 90% of licensed prescribers in Maine registered with PMP by January 2014 was not reached, and as a result, PMP registration became a

requirement for all prescribers prescribing Schedule II – IV controlled substances. How did this requirement impact physicians?

- a. Was this a smooth process for you or others that you know who went through the registration process?
- 9. Another PMP enhancement within the past year has been implementing electronic password retrieval for users who have lost/forgotten their PMP passwords. Have you found this useful or heard of other prescribers finding this useful?
- 10. The PMP program has been working with licensure boards to automatically enroll prescribers of controlled substances when they apply for or renew their professional license. By the end of March 2015, the PMP expects automatic registration of prescribers and online registration for delegates to begin. How will this impact prescribers and how they use the PMP?

## **Final questions:**

- 11. Do you have any suggestions for making sure the PMP is used effectively and efficiently?
- 12. Is there anything you would like to add that we haven't covered?

Thank you very much for your time today. Your answers will help us give input to SAMHS about how the implementation of the grant is working and improvements that could be made. If you have any questions about the evaluation, please contact Eleesa Marnagh at Hornby Zeller Associates at 207.773.9529 or <a href="mailto:emarnagh@hornbyzeller.com">emarnagh@hornbyzeller.com</a>

# PMP Interview Protocol (Year 2) Health Information Design Staff December 1, 2014

#### Interview date: Person interviewed: Person conducting interview:

Thanks for agreeing to talk to me today. I'm with Hornby Zeller Associates, and we are evaluating the PMP Enhancement Grant. I have a few questions about the activities in the second year of this grant. This interview should take about 20 minutes.

### Progress toward interoperability with other states

- The goal of the grant was to become interoperable with at least 8 states (2 in New England) by September 2014. Currently, Maine is only interoperable with 2 states: Kentucky and Alabama. Please describe some of the barriers that have occurred for HID in making progress towards this goal.
- 2. What can be done in the future to enable interoperability between states?

# Progress toward integration with Maine's Health Information Exchange operated by HealthInfoNet

- 3. One goal of the grant was to integrate PMP with electronic health records through Maine HealthInfoNet. Since April 10th, 2014, PMP users who are also HIN users are able to access PMP data from the HealthInfoNet clinical portal through a single sign-on process. Please describe HID's role in the process of integrating PMP data with HIN data.
- 4. Please describe any barriers that occurred for HID during integration of PMP and HIN data.
- 5. What steps were taken to overcome these barriers?

#### **Enhancements to the PMP**

- 6. Enhancements in the grant included adopting ASAP 4.2, allowing prescribers to set their own levels for patient monitoring, and creating a mechanism for referrals to treatment in the Treatment Data System. Please describe the status of these enhancements.
  - a. Adopting ASAP 4.2
  - b. Allowing prescribers to set their own levels (thresholds) for patient monitoring
  - c. Creating mechanism for referrals to treatment in the Treatment Data System

- 7. What were barriers to completing each of those activities?
- 8. What was done to overcome these barriers?

- 9. Do you have any suggestions for future changes/enhancements for the PMP that would make it even more accessible, usable and effective?
- 10. Is there anything you would like to add that we haven't covered?

Thank you very much for your time today. Your answers will help us give input to SAMHS about how the implementation of the grant is working and improvements that could be made.

# PMP Interview Protocol (Year 2) PMP Project Staff/Coordinators December 1, 2014

Interview date: Person interviewed: Person conducting interview:

Thanks for agreeing to talk to me today. I'm with Hornby Zeller Associates, and we are evaluating the PMP Enhancement Grant. I have a few questions about the activities in year two of the grant. This interview should take about 30 minutes.

### Progress toward interoperability with other states

- The goal of the grant was to become interoperable with at least 8 states (2 in New England) by September 2014. Currently, Maine is only interoperable with 2 states: Kentucky and Alabama. Please describe some of the barriers that have occurred for the PMP in making progress towards this goal.
- 2. What can be done in the future to enable interoperability between states?

# Progress toward integration with Maine's Health Information Exchange operated by HealthInfoNet

One goal of the grant was to integrate PMP with electronic health records through Maine HealthInfoNet. Since April 10<sup>th</sup>, 2014, PMP users who are also HIN users are able to access PMP data from the HealthInfoNet clinical portal through a single sign-on process.

- 3. Please describe any barriers that occurred for the PMP during integration of PMP and HIN data
- 4. What steps were taken to overcome these barriers?

#### **Enhancements to the PMP**

Enhancements in the grant included adopting ASAP 4.2, allowing prescribers to set their own levels for patient monitoring, and creating a mechanism for referrals to treatment in the Treatment Data System. We'll talk about each of these enhancements separately.

- 5. Adopting ASAP 4.2
  - d. What is the status? Was it successful?
  - e. What were the barriers to completing this enhancement?
  - f. What was done to overcome those barriers?

- 6. Allowing prescribers to set their own levels (thresholds) for patient monitoring
  - a. What is the status? Was it successful?
  - b. What were the barriers to completing this enhancement?
  - c. What was done to overcome those barriers?
- 7. Creating mechanism for referrals to treatment in the Treatment Data System
  - a. What is the status? Was it successful?
  - b. What were the barriers to completing this enhancement?
  - c. What was done to overcome those barriers?

- 8. Do you have any suggestions for future changes/enhancements for the PMP that would make it even more accessible, usable and effective?
- 9. What efforts are being made to sustain and continue the work of this project?
- 10. How has this grant enriched the data available to SAMHS?
- 11. What organizations or individuals have been important collaborators and facilitated progress of achieving the goals of this grant?
- 12. Is there anything you would like to add that we haven't covered?

Thank you very much for your time today. Your answers will help us give input to SAMHS about how the implementation of the grant is working and improvements that could be made.

### PMP Interview Protocol (Year 2) PMP Project Staff/Coordinators December 1, 2014

Interview date: Person interviewed: Person conducting interview:

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#### Progress toward interoperability with other states

- One goal of the grant was to become interoperable with at least 8 states (2 in New England) by September 2014. Currently, Maine is only interoperable with 2 states: Kentucky and Alabama. Please describe some of the barriers that have occurred for the PMP in achieving this goal.
- 2. What can be done in the future to enable interoperability between states?

# Progress toward integration with Maine's Health Information Exchange operated by HealthInfoNet

One goal of the grant was to integrate PMP with electronic health records through Maine HealthInfoNet. Since April 10<sup>th</sup>, 2014, PMP users who are also HIN users are able to access PMP data from the HealthInfoNet clinical portal through a single sign-on process.

- 3. Please describe any barriers that occurred for the PMP during integration of PMP and HIN data.
- 4. What steps were taken to overcome these barriers?

#### **Enhancements to the PMP**

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- 5. Adopting ASAP 4.2
  - g. What is the status? Was it successful?
  - h. What were the barriers to completing this enhancement?
  - i. What was done to overcome those barriers?

- 6. Allowing prescribers to set their own levels (thresholds) for patient monitoring
  - d. What is the status? Was it successful?
  - e. What were the barriers to completing this enhancement?
  - f. What was done to overcome those barriers?
- 7. Creating mechanism for referrals to treatment in the Treatment Data System
  - d. What is the status? Was it successful?
  - e. What were the barriers to completing this enhancement?
  - f. What was done to overcome those barriers?

- 8. Do you have any suggestions for future changes/enhancements for the PMP that would make it even more accessible, usable and effective?
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### Progress toward interoperability with other states

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- 2. What can be done in the future to enable interoperability between states?

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One goal of the grant was to integrate PMP with electronic health records through Maine HealthInfoNet. Since April 10<sup>th</sup>, 2014, PMP users who are also HIN users are able to access PMP data from the HealthInfoNet clinical portal through a single sign-on process.

- 3. Please describe any barriers that occurred for the PMP during integration of PMP and HIN data.
- 4. What steps were taken to overcome these barriers?

#### **Enhancements to the PMP**

Enhancements in the grant included adopting ASAP 4.2, allowing prescribers to set their own levels for patient monitoring, and creating a mechanism for referrals to treatment in the Treatment Data System. We'll talk about each of these enhancements separately.

- 5. Adopting ASAP 4.2
  - j. What is the status? Was it successful?
  - k. What were the barriers to completing this enhancement?
  - I. What was done to overcome those barriers?

- 6. Allowing prescribers to set their own levels (thresholds) for patient monitoring
  - g. What is the status? Was it successful?
  - h. What were the barriers to completing this enhancement?
  - i. What was done to overcome those barriers?
- 7. Creating mechanism for referrals to treatment in the Treatment Data System
  - g. What is the status? Was it successful?
  - h. What were the barriers to completing this enhancement?
  - i. What was done to overcome those barriers?

- 8. Do you have any suggestions for future changes/enhancements for the PMP that would make it even more accessible, usable and effective?
- 9. What efforts are being made to sustain and continue the work of this project?
- 10. How has this grant enriched the data available to SAMHS?
- 11. What organizations or individuals have been important collaborators and facilitated progress of achieving the goals of this grant?
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