Prescription Drug Monitoring Program Center of Excellence at Brandeis

# **COE** Briefing

Mandating PDMP participation by medical providers: current status and experience in selected states

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\*The original version of this briefing, posted in November 2013 and focusing on experience in Kentucky, can be found at

http://www.pdmpexcellence.org/sites/all/pdfs/COE%20briefing%20on%20mandates%2011%2014 %2013.pdf. The first revision added data from Tennessee and New York, and the current (2<sup>nd</sup>) revision adds data from Ohio.

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## **Mandating PDMP Participation by Medical Providers: Current Status and Experience in Selected States**

Prescription drug monitoring programs (PDMPs) must be fully utilized to reach their potential in controlling prescription drug abuse and diversion. However, in the majority of the 49 states with operational PDMPs, participation by prescribers and dispensers is voluntary, with utilization rates well below 50%. Recruitment campaigns to induce health care professionals to enroll in and use the system can be resource-intensive and often fail to produce high rates of participation. Another option, gaining acceptance, is a statutory mandate by a state for enrollment and use of a PDMP.

This briefing, now in its second revision since November 2013, describes the current status of state mandates and the implementation and outcomes thus far of mandates in Kentucky, Tennessee, New York and Ohio. Experience in these states indicates that mandates can quickly increase registration and utilization of PDMPs, with subsequent decreases in the prescribing of some commonly abused controlled substances and in measures of multiple provider episodes (MPEs, also referred to as doctor shopping). It also highlights policy and implementation issues for states considering mandates.

#### **Current status of state mandates<sup>2</sup>**

Prior to 2012, just two states, Arizona (2007) and Utah (2010), required that prescribers register with the PDMP. As of June 2014, 18 more states had adopted legislation mandating registration of prescribers and in some cases dispensers: Alabama, California, Colorado, Connecticut, Delaware, Idaho, Kentucky, Maine, Massachusetts, Mississippi, New Hampshire, New Mexico, Ohio, Rhode Island, Tennessee, Vermont, Virginia and West Virginia.

As of June 2014, 22 states had legislation mandating that prescribers and in some cases dispensers use the PDMP in certain circumstances: Arizona, Colorado, Delaware, Indiana, Kentucky, Louisiana, Massachusetts, Minnesota, Mississippi, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Rhode Island, Tennessee, Vermont, Virginia, Washington and West Virginia. There may be an accelerating trend in legislation mandating registration and utilization, with increasing numbers of states adopting mandates from 2012 to 2014.

The more recent legislative mandates, such as those adopted by Kentucky, Tennessee and New York, tend to have wider and more obligatory conditions of application than those adopted earlier. For example, Nevada's legislation, passed in 2009, requires only that a prescriber check the PDMP when "the practitioner has a reasonable belief that the patient may be seeking the controlled substance, in whole or in part, for any reason other than the treatment of an existing medical condition." The Oklahoma statute (2010) requires checking the PDMP only when prescribing, administering or dispensing methadone.

In contrast, Kentucky prescribers must query the PDMP when initially prescribing a patient a Schedule II drug or any Schedule III drug containing hydrocodone, must check the PDMP every three months for

<sup>&</sup>lt;sup>1</sup> The first version of this briefing focused on Kentucky only, see

http://www.pdmpexcellence.org/sites/all/pdfs/COE%20briefing%20on%20mandates%2011%2014%2013.pdf.

Data in this section are from the Prescription Drug Monitoring Project of the National Alliance for Model State Drug Laws, http://www.namsdl.org/prescription-monitoring-programs.cfm, reported in June, 2014. Note that these data may not be current as of the publication of this briefing due to the rapidly changing status of PDMPs.

that patient, and review the information before prescribing refills or any additional Schedule II drug or schedule III drug containing hydrocodone for that patient. (Recent modifications to the Kentucky legislation allow some exceptions, including prescribing during an emergency situation, following surgery, and for patients in hospitals and long-term care facilities.) In Tennessee, prescribers must check the database when first prescribing opioids and benzodiazepines for more than seven days and at least annually thereafter if prescribing continues. In New York, practitioners must consult the PDMP when prescribing or dispensing controlled substances in Schedules II-IV, with limited exceptions.

#### **Implementation and Impact in Selected States**

Recent experience in Kentucky, Tennessee, New York and Ohio (described below) indicates that provider mandates serve to rapidly increase enrollment and utilization of PDMPs.<sup>3</sup> As rates of PDMP participation have increased, measures of multiple provider episodes (MPEs, often called "doctor shopping") and prescribing of certain controlled substances have declined. This suggests that PDMP utilization helps to promote medically warranted prescribing and dispensing, and can assist in detecting possible controlled substance misuse and diversion.

The mandates in these states necessitated the expansion and enhancement of their PDMPs in order to meet the increased demand for patient reports. Dates for required use of the PDMP set by mandate legislation meant that the agencies in charge of PDMPs were, in some cases, given relatively short deadlines to complete their work. This in turn required increased staff and IT resources for planning and implementing the enhancements, including automated enrollment systems. It also meant long hours for PDMP staff in some cases.

Critical for the adoption of these mandates were coordinated campaigns by stakeholders to persuade medical professionals that their required use of the PDMP was in the best interests of patients and providers. Advocates for the mandates cited accumulating evidence that PDMPs can help improve clinical decision-making without unduly burdening medical workflow.<sup>4</sup> Nevertheless, some legislative requirements to use the PDMP were renegotiated in response to provider concerns.

#### Kentucky

Kentucky passed legislation in April 2012 requiring enrollment and use of its PDMP, KASPER (Kentucky All Schedule Prescription Electronic Reporting) starting on July 20 of that year. Enrollment increased rapidly, from 7,911 registered prescriber and pharmacist users in April 2012 to 25,409 by the end of July 2013. The utilization of the system increased commensurately: the total number of KASPER prescription history reports requested by users rose from 811,000 in 2011 to 2,691,000 in 2012, an increase of over 230 percent, then rose to 4,586,500 reports in 2013, up 70 percent. Overall dispensing of controlled substances declined after the mandate, from 7.39 million doses in the one year period from August 2011 to July of 2012, to 6.76 million doses in August 2012 to July of 2013, a drop of 8.5 percent. Doses dispensed declined for hydrocodone (10.3%), oxycodone (11.6%), oxymorphone (35%) and alprazolam (13.4%) but increased for methylphenidate (7.5%) and amphetamine (9.2%). Prescriptions for

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<sup>&</sup>lt;sup>3</sup> These states were included in this report because data on utilization and outcomes sensitive to PDMP utilization were available. Data from other states, as it becomes available, may not replicate the patterns described here.

<sup>&</sup>lt;sup>4</sup> For a survey of some evidence, see the COE Briefing on PDMP Effectiveness at <a href="http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf">http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf</a>.

<sup>&</sup>lt;sup>5</sup> The legislation can be viewed at http://www.namsdl.org/documents/RequirementtoAccess09172012.pdf.

buprenorphine, a drug used in treating opioid dependence, increased from 56,686 in the 3<sup>rd</sup> quarter of 2011 to 107,466 in the 2<sup>nd</sup> quarter of 2013, up nearly 90 percent.

In response to the mandate, Kentucky's Cabinet for Health and Family Services (CHFS) acted quickly to institute a paperless online registration process based upon prescriber and pharmacist licensee files provided by the appropriate licensure boards. To handle the increased workload, CHFS increased the Help Desk from one to four full time staff, increased KASPER administration from two to three full time staff, and utilized four temporary staff members to process registrations and answer administrative emails and phone calls. Legislation enabling the mandate provided for funding from the Office of the Attorney General to support KASPER operations and enhancement for two fiscal years.

A vocal minority of medical professionals in Kentucky originally opposed the mandate. After its adoption, some practitioners continued to express concerns to legislators and licensing boards about the enrollment and utilization requirements, as well as about additional controlled substance prescribing standards implemented through licensing board regulations. Modifications to the legislation were made in response to these concerns, but mandatory registration and use remain as originally adopted. To facilitate compliance with the mandate and increase familiarity with KASPER, Kentucky is conducting a prescriber education campaign, including a web-based training module on the use and benefits of PDMP data. A year and a half after the mandate was adopted, few complaints about the requirement to use KASPER have been received. An evaluation of the mandate and other efforts to address prescription drug abuse in the state is being conducted by the University of Kentucky.

#### **Tennessee**

Experience in Tennessee parallels that of Kentucky: a rapid increase in enrollment and use of the PDMP, and a subsequent drop in opioid prescribing. The Tennessee mandate required that providers enroll in the Controlled Substance Monitoring Database (CSMD, Tennessee's PDMP) by January 1, 2013, and required that prescribers check the database starting April 1 of that year. (Dispensers are not required to check it, but are instructed to do so if they have reasonable suspicion that a patient is attempting to obtain medically unnecessary controlled substances.) Enrollment in CSMD increased from 15,323 providers in 2011 to 34,802 by the end of 2013, up over 125%. As a result, the number of prescription history reports requested rose sharply, from an average of 123,911 reports per month in 2011 to an average of 415,505 reports per month for the period from April-December 2013. The number of opioid prescriptions reported to the PDMP fell from 1,622,050 in August of 2012 to 1,497,759 in July of 2013, down over 7%, while the total mme (morphine milligram equivalents) dispensed dropped nearly 6%. During the same period, the number of individuals meeting a "5x5x3" threshold for multiple provider episodes or MPEs (being prescribed to by 5 or more prescribers and filling prescriptions at 5 or more pharmacies in a 3 month period, hence 5x5x3) declined from 2,194 (August-October, 2012) to 1,395 (May-July 2013), down 36%.

As described by the PDMP administrator, implementation of the Tennessee mandate required a significant increase in staff, including a project manager and two additional administrative support positions. New servers and load balancers were added to handle the anticipated increase in demand on the system. Considerable effort went into designing an online automated enrollment process, without which it would have been impossible to add so many users so quickly. However, many enrollments still

<sup>&</sup>lt;sup>6</sup> For further details on the implementation of the Kentucky mandate, see the first version of this briefing posted at <a href="http://www.pdmpexcellence.org/sites/all/pdfs/COE%20briefing%20on%20mandates%2011%2014%2013.pdf">http://www.pdmpexcellence.org/sites/all/pdfs/COE%20briefing%20on%20mandates%2011%2014%2013.pdf</a>.

had to be processed manually. Overall, the project stayed on schedule, although having automated systems in place earlier would have reduced the workload on staff.

An advisory committee of major stakeholders coordinated the campaign for the mandate, which focused on the role of the PDMP in promoting safe prescribing and dispensing. Many providers were initially opposed, but PDMP staff eventually won their support by making a data-driven case for the mandate, citing rising prescription drug overdoses and deaths. Some modifications to the legislation were made in response to provider concerns about workflow, including the addition of extender (delegate) accounts which allow both licensed and unlicensed employees of a medical practice to access the database, with the provider(s) assuming liability for any misuse of data.

#### **New York**

New York implemented its new PDMP, pursuant to the I-STOP legislation (Internet System for Tracking Over-Prescribing), on June 12, 2013, then mandated use of the system by prescribers on August 27. Prior to implementation of the new Prescription Monitoring Program Registry ("PMP Registry"), New York's first online PDMP had only 5,087 users who requested 465,639 reports over three and a half years, averaging approximately 11,000 reports per month. As of February 17, 2014, six months after the mandate began, the number of active users reached 67,779. Between August 27, 2013 and February 17, 2014, these users requested over 7.3 million reports on over 3.5 million unique patients. This averages well over 42,300 reports requested per *day*, compared to the 11,000 per *month* requested prior to I-STOP implementation.

Although I-STOP did not require practitioners to register with the PDMP, the mandate had a dramatic effect on registrations. New York's PDMP is accessed through a state website with several hundred other applications already utilized by practitioners. Between February 2013 and January 2014, the number of registered prescribers increased from 50,857 to 90,121, while the number of existing but inactive accounts decreased by almost 50%. Similarly, the number of pharmacist accounts increased from 1,097 in February 2013 to 8,562 in January 2014. As in Kentucky and Tennessee, the mandate seems to have driven a rapid increase in both registration and utilization of the PDMP.

Comparing data from the fourth quarter of 2012 against the fourth quarter of 2013 (the first full quarter following the mandate), there were notable differences in prescribing and dispensing behavior. The number of individuals meeting a 5x5x3 threshold for MPEs decreased by 74.8%, the number of prescriptions for all opioids decreased by 9.53%, and the number of individuals with a prescription for an opioid decreased by 9.51%. The largest decreases in prescriptions were seen in hydrocodone (-20.4%)<sup>7</sup>, codeine 5 (-33.2%), and codeine 3 (-13.2%). There were slight increases in the number of prescriptions for oxycodone (0.72%) and individuals with a oxycodone prescription (1.55%), but a decrease in the total number of practitioners issuing these prescriptions (-8.49%) and total doses of oxycodone dispensed (-2.49%). As in Kentucky, there was a marked increase in the number of buprenorphine prescriptions (14.6%) and patients being prescribed this drug (12.8%). It is likely that the greatly increased use of New York's PDMP contributed to these outcomes.

Because the New York PDMP, unlike many, has stable funding via fees collected from state health insurers, resources were available to make the significant enhancements required by the I-STOP law.

<sup>&</sup>lt;sup>7</sup> Some of the decrease in hydrocodone prescribing is likely due to New York's reclassification of hydrocodone as a Schedule II drug, effective February of 2013.

Additional staff hired for the project included five programmers and a pharmacy consultant with IT expertise, along with two Medicaid staff who were transferred to work full time on I-STOP. The project's programming took seven and a half months; costs for staff time and infrastructure upgrades to New York's custom-built PDMP totaled approximately \$1 million.

Potential users of the PMP Registry were advised of the upcoming mandate via notifications sent through mass mail and email communications, as well as information that accompanied registrations and shipments of New York's Official Prescription Form pads (provided at no charge to prescribers). Despite prior opposition and concerns, many professional societies partnered with PDMP staff to help educate their members about I-STOP's requirements, ensuring higher compliance rates. PDMP staff also gave numerous presentations around the state to medical professionals, pharmacy societies and other interested stakeholders, explaining the purpose and benefits of PDMP utilization. The presentations were particularly effective with the medical community when the PDMP was described as a tool to help ensure safe prescribing and improve healthcare, and not solely to detect prescription drug diversion. These presentations included current research, reports and surveys of PDMP users<sup>8</sup> suggesting that prescription monitoring data can play a key role in clinical decision-making.

#### Ohio

Ohio has taken several recent steps to address the prescription drug epidemic, including passing legislation in October 2011 requiring licensing boards to create regulations governing prescriber and dispenser use of Ohio's PDMP, the Ohio Automated Rx Reporting System (OARRS). (The legislation also included measures targeting pill mills and established a licensing system for pain management clinics and a drug take-back program.) In response, the medical, dental and nursing Boards promulgated rules requiring that if a prescribing physician, dentist or nurse has reason to believe that treatment with controlled substances in Schedules II-V will extend beyond 12 weeks, she must request and review a prescription history report on the patient at the beginning of treatment, then query OARRS on that patient at least once annually thereafter. Other boards (e.g., pharmacy, optometry) adopted similar rules.

After rules were adopted the utilization of OARRS increased dramatically, from 911,000 reports requested in 2010, to 1.8 million in 2011, 5.4 million in 2012, 7.3 million in 2013, and over 2 million in the first quarter of 2014. During this period the rate of those meeting the 5x5x3 MPE threshold declined from 25 per 100,000 residents in the first quarter of 2010 to just over 10 per 100,000 in the last quarter of 2013. From 2012 to 2013, Ohio also experienced a drop in the number of doses and prescriptions of its two most prescribed drugs, hydrocodone and oxycodone: hydrocodone doses dropped by 3.5% and prescriptions by 11.1%; oxycodone doses dropped 1.7%, prescriptions 8.7%. The morphine equivalent dose (MED) per opioid prescription also fell approximately 12% from 2010 (58) to 2013 (51).

It should be noted that other actions taken in Ohio besides the rules mandating PDMP use may have played a role in these outcomes. In the third quarter of 2012, guidelines were published and adopted on

<sup>&</sup>lt;sup>8</sup> Some of these are described in the COE Briefing on PDMP Effectiveness at <a href="http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf">http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf</a>.

<sup>&</sup>lt;sup>9</sup> See OARRS Statistics - 2013 Data (updated 4/7/2014) at <a href="https://www.ohiopmp.gov/portal/docs.aspx">https://www.ohiopmp.gov/portal/docs.aspx</a>. Additional data in this section provided courtesy of OARRS.

<sup>&</sup>lt;sup>10</sup> See Kreiner, P, "The Prescription Behavior Surveillance System: Applications of De-Identified PDMP Data in Public Health Surveillance slide 9, at <a href="http://pdmpexcellence.org/sites/all/pdfs/Kreiner\_Expert%20Panel%20webinar\_June%202014%20v2.pdf">http://pdmpexcellence.org/sites/all/pdfs/Kreiner\_Expert%20Panel%20webinar\_June%202014%20v2.pdf</a>.

the prescribing of opioids in emergency departments, and in 2013 guidelines were adopted on long-term opioid prescribing, both of which may have helped reduce opioid prescribing. However, the increased utilization of OARRS is directly attributable to the mandates by boards.

In June of 2014, Ohio passed legislation adding further requirements on using OARRS, including a requirement for those prescribing opioids or benzodiazepines, as well as all pharmacists and pharmacy interns, to have an OARRS account when renewing their license. In addition, prescribers must request an OARRS report on a patient prior to initially prescribing or personally furnishing an opioid or benzodiazepine and then again every 90 days as long as treatment continues, with a few exceptions, e.g., if the prescription is for seven days or less, for treatment of cancer, or for use by hospice patients. These additional measures may increase utilization even further, helping to maximize the impact of OARRS on prescribing, multiple provider episodes and health outcomes.

The bill originally introduced to mandate use of OARRS (HB 341) faced stiff opposition from many in the prescriber community. To win their support, the Board of Pharmacy worked with the bill's sponsor to narrow the classes of prescriptions requiring use of OARRS to opioid analgesics and benzodiazepines, the drugs most implicated in Ohio's prescription drug overdose deaths according to data from the Department of Health. In addition, the sponsor and the Board recommended exceptions for post-surgical pain prescriptions and prescriptions not exceeding a seven day supply. These changes helped to win backing from significant medical constituencies, including pediatricians, emergency department physicians, dentists and the hospital community. The current version of the bill therefore reflects a data-driven compromise between all parties involved, one which had the intended effect of rapidly expanding use of OARRS.

#### Conclusion

Recent experience in Kentucky, Tennessee, New York and Ohio indicates that mandating provider use of PDMPs can result in a rapid increase in enrollment and requests for prescription information. It seems likely that these increases would not have occurred but for the mandates. Indeed, performance measure data reported by states participating in the Bureau of Justice Assistance Harold Rogers PDMP Grant Program suggest that, absent a mandate, prescriber enrollment in the PDMP is a relatively slow process, with enrollment still increasing 4 to 5 years after online access is made available, and reaching, after that time, roughly 50% of prescribers who write at least one prescription per month.<sup>11</sup>

Increased utilization in all four states is associated with declines in opioid prescribing and in Tennessee, New York and Ohio with declines in measures of MPEs (data on MPEs were not available from Kentucky). These effects are consistent with more discriminating, medically-indicated prescribing and better detection of possible doctor shoppers and those in need of clinical interventions to address addiction and pain management problems. Such outcomes can in turn help prevent or reduce costs and harms related to prescription drug abuse, such as unnecessary prescriptions, treatment of drug abuse-related health problems, lost work and productivity, overdoses, hospital admissions and deaths. Declines in these health-related indicators, or slower increases in comparison with states without

<sup>&</sup>lt;sup>11</sup>See the COE document "Bureau of Justice Assistance Prescription Drug Monitoring Program Performance Measures Report: January 2009 through June 2012," pp. 14-16, at

http://www.pdmpexcellence.org/sites/all/pdfs/BJA%20PDMP%20Performance%20Measures%20Report%20Jan%202009%20to%20June%202012%20FInal\_with%20feedback.pdf.

mandates, would suggest that requiring use of PDMPs, perhaps in combination with other prescription drug diversion prevention efforts, is helping to reduce misuse of prescription drugs.<sup>12</sup>

Not all states will be able to pursue a resource-intensive, rapid implementation approach to required PDMP participation, nor will they need to. States considering mandates can take resource limitations into account in developing a realistic implementation schedule that eventually results in full participation. Such is the case in Massachusetts, which until recently was conducting a phased enrollment in which controlled substance license renewals, required every three years, trigger a prescriber's registration (the state has since implemented expedited enrollment in response to a declared opioid overdose public health emergency). Since states will take different approaches to implementing a mandate, involving a range of policies and procedures, the costs and relative efficiencies of approaches can be compared.

The adoption of a mandate necessarily places additional demands on a PDMP coming from greater utilization. This presents a legitimate opportunity to solicit increased financial and staff support. It also requires enhancements in operations and infrastructure to enable increased capacity and efficiency. Efforts to facilitate provider enrollment and easy access to PDMP data, without compromising data security, will help ensure a mandate's acceptance and help make provider use of PDMP data a standard of care.

Lastly, the experience of states described here suggests that to generate support for a mandate, PDMP advocates should work with the medical community and other stakeholders to build an evidence-based case for its benefits; they must also be willing to negotiate reasonable compromises when crafting legislation. States considering mandates can learn from the early adopters about what does and doesn't work in laying the groundwork for a mandate and implementing its provisions.

As more states adopt mandates, which seems likely given the accelerating trend of adoption since 2012, more data will become available to determine if, as now seems likely, they are a best practice for promoting PDMP utilization. Further experience will no doubt increase the range of tested options for states considering mandates. It will also be important to monitor for any unintended consequences or concerns related to required use of PDMPs, although no major concerns have surfaced thus far. Future COE reports will continue to track developments in these and other efforts to increase PDMP utilization by providers and other end users.

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<sup>&</sup>lt;sup>12</sup> Deaths from prescription drug overdoses have recently leveled off in Kentucky after several years of increases. For other examples of how health outcomes might be improving as a result of PDMP utilization, see the COE Briefing on PDMP Effectiveness, 3<sup>rd</sup> revision, at <a href="http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf">http://www.pdmpexcellence.org/sites/all/pdfs/Briefing%20on%20PDMP%20Effectiveness%203rd%20revision.pdf</a>, page 7.