



Oregon Prescription Drug Monitoring Program

2014 Annual Report
to the PDMP Advisory Commission

Oregon
Health
Authority

PUBLIC HEALTH DIVISION
Prescription Drug Monitoring Program

2014 Annual Report to the PDMP Advisory Commission

Acknowledgements

Technical Data Contact:

Heidi Murphy, MPH, Research Analyst, Prescription Drug Monitoring Program, Injury and Violence Prevention Section, Heidi.R.Murphy@state.or.us

Media Contact:

Susan Wickstrom, Communications Analyst, Susan.D.Wickstrom@state.or.us, 971-673-0892

Program Contacts:

Todd Beran, MA, Team Lead, Prescription Drug Monitoring Program, Injury and Violence Prevention Section, Todd.Beran@state.or.us

Lisa Millet, MSH, Section Manager, Injury and Violence Prevention Section, Center for Prevention and Health Promotion, Lisa.M.Millet@state.or.us

Additional Program Staff:

Dagan Wright, PhD, MPH, Lead Research Analyst, Injury and Violence Prevention Section, Dagan.A.Wright@state.or.us

Stephanie Vesik, Administrative Specialist, Prescription Drug Monitoring Program, Injury and Violence Prevention Section, Stephanie.G.Vesik@state.or.us

Oregon Health Authority
Public Health Division
Center for Prevention and Health Promotion
Injury and Violence Prevention Program
800 NE Oregon St. Ste. 730
Portland, Oregon 97232

January 2015

Table of Contents

List of Figures	2
List of Tables	2
Executive Summary	3
Introduction.....	5
Operations and Business Processes	6
Operations Metrics	6
<i>Pharmacy Reporting Compliance</i>	6
<i>Number of PDMP System Users</i>	6
<i>Utilization of PDMP System</i>	9
<i>Patient-Requested Reports</i>	11
<i>Health Care Regulatory Board Reports Requested</i>	11
<i>Law Enforcement Reports Requested</i>	12
PDMP System Changes and Customizations.....	12
Advisory Commission Activities.....	13
Evaluation	14
Collaborations and Partnerships	15
Barriers and Needs	16
Discussion	18
Recommendations.....	19

List of Figures

Figure 1. PDMP system accounts by discipline.....	6
Figure 2. Percent of prescriptions written by prescribing cohort.....	8
Figure 3. Average number of PDMP system queries per year by discipline.....	9
Figure 4. Number of reports listing all Rx dispensed under a DEA license by discipline	10
Figure 5. Number of patient-requested reports by recipient type	11

List of Tables

Table 1. Number and percent of prescribers with PDMP accounts by discipline	7
Table 2. Percent of prescribers with PDMP accounts by prescribing cohort	8
Table 3. Number of PDMP queries by discipline by year	9
Table 4. Number of health care regulatory reports requested by discipline	11

Executive Summary

In 2009, the Oregon Legislature passed Senate Bill 355 mandating that the Oregon Health Authority (OHA) develop a Prescription Drug Monitoring Program (PDMP). The program became operational in September 2011. The PDMP is an electronic, Web-based data system that collects information on Schedule II – IV controlled substances dispensed by Oregon-licensed retail pharmacies. For authenticated system users who can prescribe or dispense controlled substances, the PDMP provides 24-hour, seven-day-a-week access to information on controlled substances dispensed to their patients or customers. The intent of the PDMP is to help health care providers improve patient care and prevent some of the problems associated with controlled substances.

In 2013, the Oregon Legislature passed Senate Bill 470 amending the PDMP legislation. The bill authorized the PDMP to collect additional prescription data (patient sex, days supplied, and refill data) and increased system access to PDMP information. Effective January 1, 2014, authorized office staff can access information on behalf of prescribers and pharmacists, the State Medical Examiner and designees can access the system for autopsies and death investigations, and prescribers in neighboring states (WA, ID, and CA) can access the system for patient assessment and treatment. Prescribers are also permitted to review prescriptions dispensed under their own DEA license number.

Operational findings below are presented using 2014 data unless otherwise indicated.

Findings

In 2014, almost 100 percent of the pharmacies required to report controlled substance prescription data uploaded information into the system, and 96 percent of pharmacies complied with the mandated seven-day statutory limit for reporting.

Between January 2013 and December 2014, the total number of system accounts increased by 37 percent from 7,253 to 9,904, including 1,275 delegate accounts for health care provider and pharmacist office staff (Figure 1).

In 2014, forty-two percent of all Oregon-licensed health care providers who prescribed at least one Schedule II – IV controlled substance had a PDMP account (Table 1).

In 2014, PDMP staff authorized systems accounts for 202 health care providers in states bordering Oregon (CA, ID, and WA); these accounts represent two percent of the total number of active accounts.

In 2014, seventy-six percent of the controlled substance prescription records in the PDMP were prescribed by 4,000 health care providers (Figure 2); of these 4,000 most frequent prescribers, 66 percent had PDMP accounts (Table 2).

From 2013 to 2014, the total number of patient queries conducted by health care providers and pharmacists increased by 30 percent from 621,570 to 810,996 (Table 3).

In 2014, the average number of patient queries conducted annually by health care providers and pharmacists increased for most provider groups as compared to 2013 (Figure 3). The exception was MDs, PAs, and DOs, as a combined discipline, who conducted fewer queries in 2014 compared to 2013. The availability of delegate access for the first time in 2014 may have impacted provider queries during 2014, as delegates may have accessed the system rather than providers. However, the extent of this impact is unknown.

In 2014, prescribers ran a total of 1,391 reports displaying all prescriptions dispensed under their DEA license number (Figure 4).

In 2014, eighty-seven percent of patient-requested reports were sent directly to patients. Fewer patient-requested reports were sent to a third-party provider at the patients' requests as compared to 2013 (Figure 5).

From 2013 to 2014, the total number of health care regulatory board requests for PDMP information decreased by 20 percent from 300 to 235 (Table 4).

In 2014, the program completed three law enforcement requests.

Recommendations

Recommendations were developed from the information gathered from business operations, reports, and evaluation efforts.

- Assess and address PDMP staff resource needs.
- Institutionalize an evaluation research vetting process with the PDMP Advisory Commission as a preliminary step that also includes:
 - Review and approval of data use agreements
 - Vetting researchers
 - Vetting research aims to determine merit
 - Review and sign off on Internal Review Board proposals
 - Monitoring research projects
 - Closeout procedures on research projects
- Complete an annual process that prepares a PDMP data file for evaluation research and epidemiologic assessment.
- Establish a new target to sign up 90 percent of the 4,000 most frequent controlled substance prescribers to access the PDMP.
- Initiate the adoption of PDMP use guidelines in health systems.
- Increase the number of substance abuse treatment providers using voluntary patient reports in treatment plans.
- Discuss necessary elements, possible challenges, and possible benefits of interstate data sharing with Washington's Prescription Monitoring Program.

Introduction

This report serves to satisfy Oregon statute that requires the OHA to annually submit a report to the Advisory Commission regarding the PDMP. This report contains information on the operation of the program including: basic program and system metrics, status on key operational objectives, and findings from various program evaluation activities. The overall goal of this report is to provide information to guide the operation of the PDMP program, assess PDMP utilization, answer questions about the impact of PDMP information on clinical practice and patient outcomes, and if possible determine what impacts, if any, the PDMP system might have on community health.

Operations and Business Processes

In 2014, the PDMP completed its third full year of operation. The program monitors metrics to evaluate operations and improve business processes. Copies of quarterly business operation reports can be found at <http://www.orpdmp.com/reports.html>.

Operations Metrics

Pharmacy Reporting Compliance

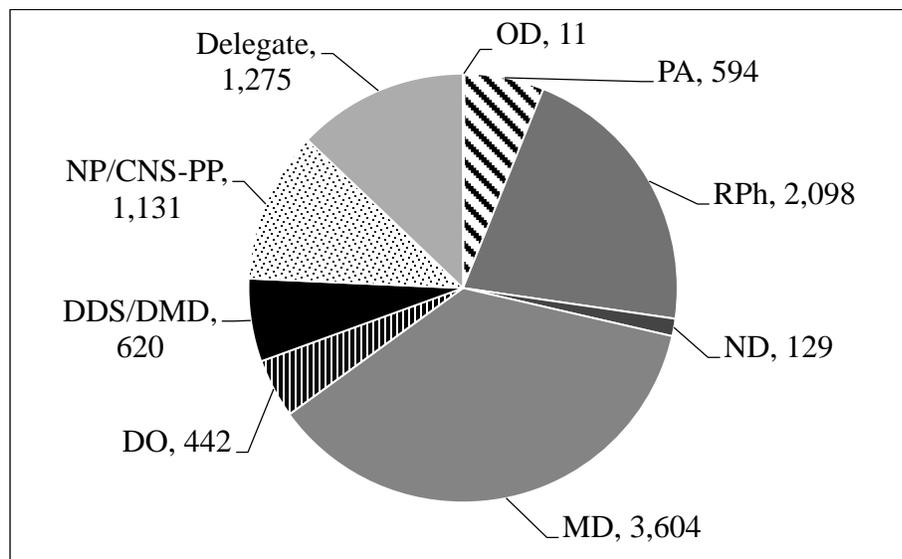
Retail pharmacies with controlled substance licenses issued by the Oregon Board of Pharmacy are required to report Schedules II – IV controlled substance prescription data no later than one week after dispensation. Continually, new pharmacies open and existing pharmacies close, so the management of reporting compliance is an ongoing operation.

In 2014, almost 100 percent of the pharmacies required to report controlled substance prescription data submitted data to the system. Of those pharmacies that reported data, 96 percent reported within one week of dispensation, as required by law.

Number of PDMP System Users

Individuals permitted to access the PDMP system for information on their patients or customers include: Oregon-licensed health care providers and pharmacists and their delegated office staff; health care providers licensed in California, Idaho, and Washington and their delegated office staff; and the State Medical Examiner and designees of the State Medical Examiner.

Figure 1. PDMP system accounts by discipline¹, Oregon, September 2011 to December 2014, N=9,904



¹ Key to Abbreviations: DDS/DMD – Dentist; DO – Doctor of Osteopathy; DP – Doctor of Podiatry; MD – Medical Doctor; ND – Naturopath; NP/CNS-PP – Nurse; OD – Doctor of Optometry; PA – Physician Assistant; RPh – Pharmacist.

From 2013 to 2014, the total number of active system accounts increased by 37 percent from 7,253 to 9,904. This increase was primarily driven by the 1,275 delegate accounts created for health care provider and pharmacist office staff. Among all disciplines, naturopathic doctors saw the greatest increase in new system accounts at 48 percent, followed by physician assistants at 30 percent and pharmacists at 28 percent. Medical doctors saw the lowest increase in new system accounts at 13 percent.

Health care providers practicing in states bordering Oregon (CA, ID, and WA) accounted for two percent (n=202) of the total number of PDMP system accounts. There were 131 accounts for Washington providers, 52 for Idaho providers, and 19 for California providers.

Table 1. Number and percent of Oregon-licensed controlled substance (CS) prescribers with PDMP accounts, by discipline, through December 2014

Discipline ²	Prescribed at least one CS ³ in 2013	Prescribers with system accounts	Percent of CS prescribers with PDMP accounts
NP/CNS-PP	1,887	1,131	60%
DDS/DMD	2,409	620	26%
DO	750	442	59%
MD	8,822	3,604	41%
ND	344	129	38%
PA	1,136	594	52%
OD	52	11	21%
TOTAL	15,400	6,531	42%

Sixty-four percent, or 2,098 of an estimated 3,300 pharmacists who dispense controlled substances, had PDMP system accounts.

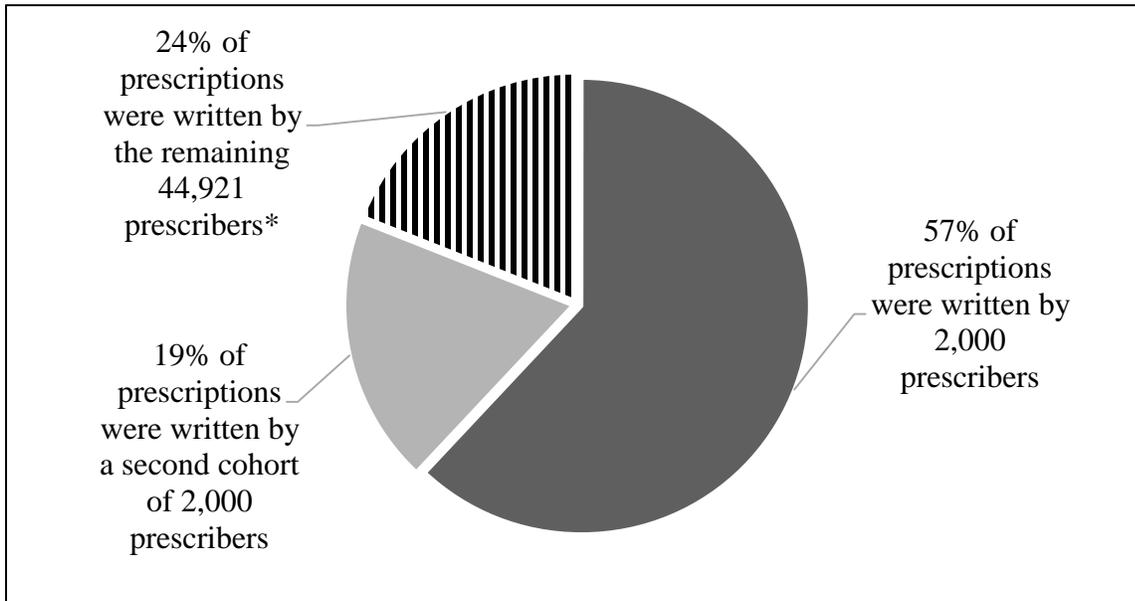
² Key to Abbreviations: DDS/DMD – Dentist; DO – Doctor of Osteopathy; MD – Medical Doctor; ND – Naturopath; NP/CNS-PP – Nurse; OD – Doctor of Optometry; PA – Physician Assistant.

³ CS are Schedule II – IV prescription drugs.

Most Frequent Prescribers

In 2014, seventy-six percent of the controlled substance prescription records in the PDMP were prescribed by 4,000 health care providers – see Figure 2.

Figure 2. Percent of controlled substance prescriptions written by prescribing cohort, Oregon, 2014



*The number of remaining prescribers includes 33,521 out-of-state prescribers who are not licensed in Oregon.

In June 2014 as part of a Department of Justice, Bureau of Justice Assistance Harold Rogers PDMP grant, the OHA hired two temporary staff to conduct face-to-face outreach to target and sign up the 4,000 most frequent prescribers – i.e. health care providers who prescribe 76 percent of the controlled substance medications in the PDMP.

Table 2. Percent of Oregon-licensed controlled substance prescribers with PDMP accounts, by most frequent prescribing cohort, Oregon, 2013 – 2014

Prescribing cohort	2013	2014
2,000 most frequent prescribers	66%	74%
4,000 most frequent prescribers	58%	66%
All Oregon-licensed prescribers	37%	42%

Utilization of PDMP System

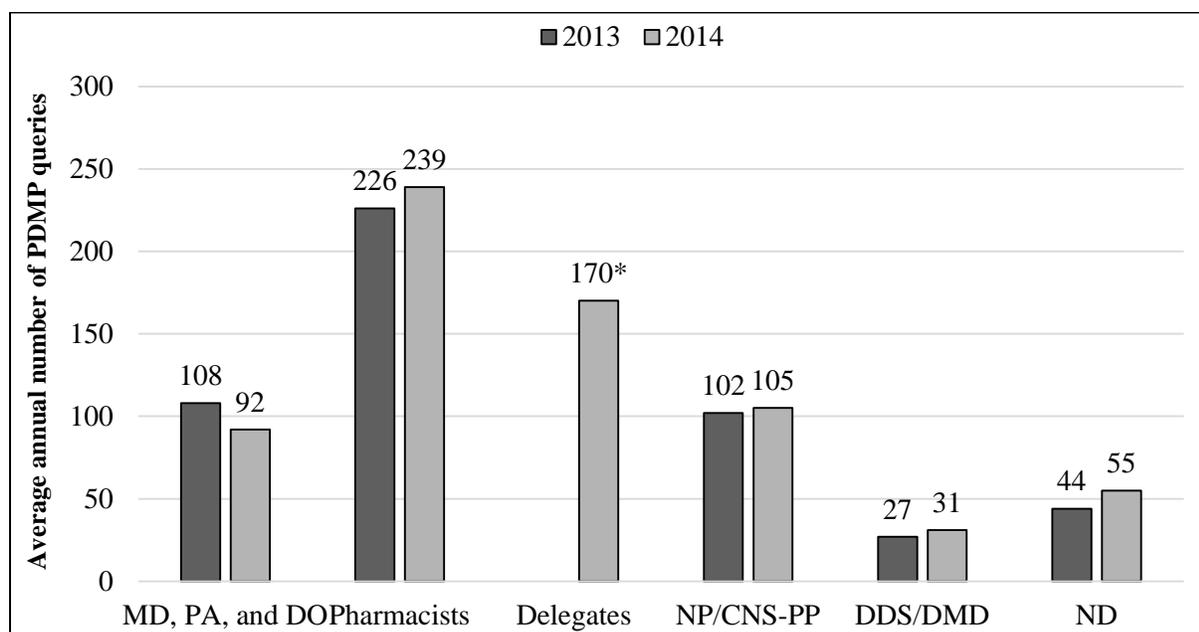
The law does not require health care providers and pharmacists to use the PDMP. System use is voluntary. In 2014, changes in statute allowed office staff to access PDMP information as delegates on behalf of prescribers and pharmacists.

Table 3. Number of PDMP queries by discipline by year, Oregon, 2012 – 2014, N=1,714,221

Discipline	2012	2013	2014	Totals: 2012 - 2014
MD, PA, and DO	207,140	279,920	257,614	744,674
Pharmacists	21,899	265,079	365,598	652,576
Delegates	N/A	N/A	95,198	95,198
NP/CNS-PP	47,621	67,677	80,306	195,604
DDS/DMD	3,706	6,243	7,750	17,699
ND	1,289	2,651	4,530	8,470
Optometrists	0	0	0	0
TOTAL	281,655	621,570	810,996	1,714,221

From 2013 to 2014, the total number of patient queries conducted by health care providers and pharmacists increased by 30 percent. Naturopathic doctors had the highest increase in system queries conducted among disciplines at 71 percent, followed by pharmacists at 38 percent, and dentists at 24 percent. In 2014, MDs, PAs, and DOs as a combined discipline conducted eight percent less system queries as compared with 2013. Delegates performed 95,198 queries during 2014.

Figure 3. Average number of PDMP system queries per year by querying users, by discipline, Oregon, 2013 – 2014

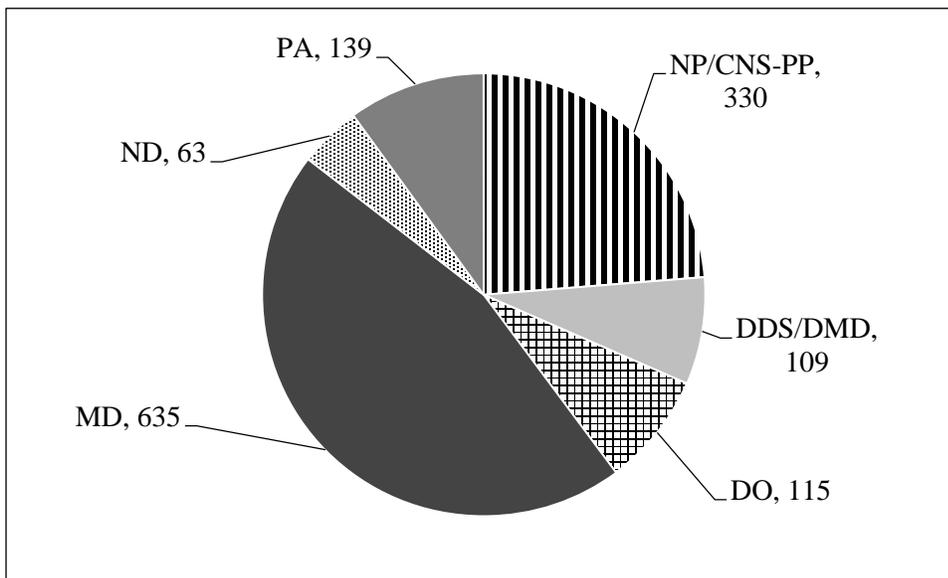


* Delegates began accessing PDMP data in 2014.

In 2014, except for MDs, PAs, and DOs as a combined discipline, the average number of patient queries conducted annually by health care providers and pharmacists increased.

In 2014, a legislative change allowed prescribers to get a list of all controlled substance prescriptions dispensed under their DEA license number. The program developed a system report to allow prescribers to get this information.

Figure 4. Number of reports listing all prescriptions dispensed under a DEA license number by discipline⁴, Oregon, 2014. (n = 1,391)



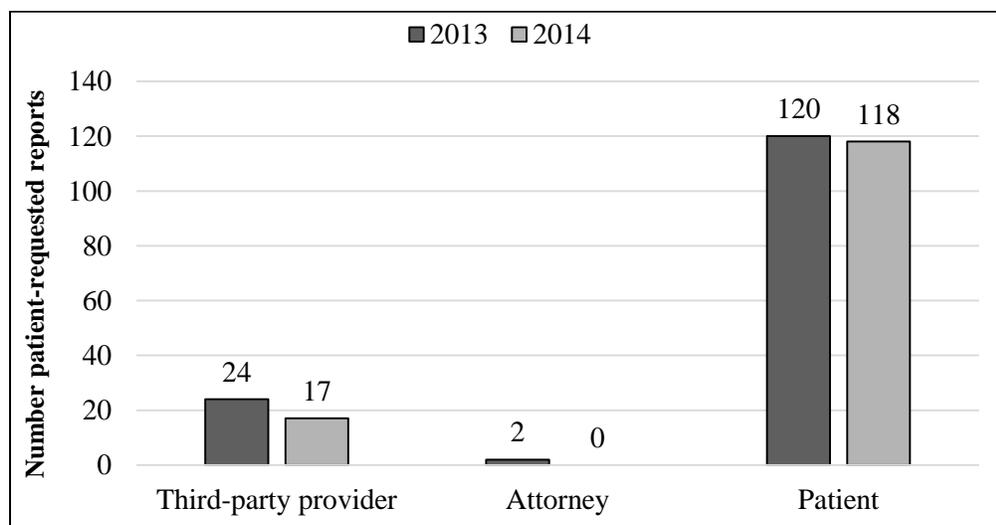
In 2014, prescribers ran a total of 1,391 reports listing all prescriptions dispensed under their DEA license number. The number of reports run declined during the year in 2014, from 624 reports in the first quarter to 281 reports in the fourth quarter.

⁴ Key to Abbreviations: DDS/DMD – Dentist; DO – Doctor of Osteopathy; MD – Medical Doctor; ND – Naturopath; NP/CNS-PP – Nurse; PA – Physician Assistant.

Patient-Requested Reports

Patients may request a copy of their PDMP information. This includes a list of prescriptions dispensed to a patient and a list of system users who accessed the patient’s PDMP information. Patients may also request that their PDMP information be sent to a third party such as a behavioral health care provider or an attorney. Patient record requests must be fulfilled within 10 business days. In 2014, all patient requests were fulfilled within this timeframe.

Figure 5. Number of patient-requested reports by recipient type, Oregon, 2013 – 2014



In 2014, eighty-seven percent of patient-requested reports were sent directly to patients. Patient-requested reports sent to third-party providers (e.g., substance abuse treatment providers) decreased by 29 percent as compared to 2013. No patients requested that their reports be sent to attorneys.

Health Care Regulatory Board Reports Requested

Health care regulatory boards may request PDMP information for an active investigation related to licensure, renewal, or disciplinary action involving an applicant, licensee, or registrant.

Table 4. Number of health care regulatory reports requested by discipline, Oregon, 2013 – 2014

Discipline	2013	2014	Percent of change
Medical Board	175	144	-18%
Board of Naturopathic Medicine	65	47	-28%
Board of Nursing	51	41	-20%
Board of Pharmacy	5	0	-100%
EMS	3	2	-33%
Board of Dentistry	1	1	0%
TOTAL	300	235	-20%

From 2013 to 2014, the total number of requests for PDMP information made by health care regulatory boards decreased by 20 percent.

Law Enforcement Reports Requested

Federal, state, or local law enforcement agencies engaged in an authorized drug-related investigation may request PDMP information on the individual being investigated. A valid court order based on probable cause is required as part of the request. The program forwards all law enforcement requests for PDMP information to the Department of Justice for review.

In 2014, the program completed three law enforcement requests.

PDMP System Changes and Customizations

In 2013, the Oregon Legislature passed Senate Bill 470 to amend the PDMP legislation. The bill authorized the PDMP to collect additional prescription data (patient sex, days supplied, and refill data) and increased system access to PDMP information – i.e. authorized office staff could access information on behalf of prescribers and pharmacists, the State Medical Examiner and designees could access for autopsies and death investigations; and prescribers in neighboring states (WA, ID, and CA) could access for patient assessment and treatment. Prescribers were also permitted to review prescriptions dispensed under their own DEA number.

These statutory changes prompted significant system changes. The first system customization allowed sign-up and access by delegated and authorized office staff. Health care providers and pharmacists are responsible for their office staff's use of system information. Additionally, the OHA amended the PDMP administrative rules to require system users with delegates to audit their delegates' access monthly. A system access audit report was developed that allows system users to review office staff use of the PDMP and ensure appropriate access to patient information. The State Medical Examiner uses these same processes to authorize and review designees' access.

The program worked with the vendor to streamline the query screen and allow for a linear input of information. Online viewing of patient reports was reconfigured to minimize scrolling and present the data in an easier-to-read format.

The legislative changes prompted another significant system customization – patient reports that contain morphine equivalent dosage (MED) information. A growing body of evidence shows that opiate overdose risk increases as MED increases, most significantly with MED greater than 120 mg per day.^{5, 6, 7, 8} Adding MED information to opioid prescription records in 2015 will facilitate the identification of patients at increased risk for overdose.

⁵ Dunn KM, Saunders JD, Rutter CM, et al. Opioid Prescriptions for Chronic Pain and Overdose: A Cohort Study. *Ann Intern Med.* 2010;152:85-92.

⁶ Gomes T, Mamdani MM, Dhalla IA, et al. Opioid Dose and Drug-Related Mortality in Patients with Nonmalignant Pain. *Arch Intern Med.* 2011; 171(7):686-691.

Advisory Commission Activities

The Prescription Drug Monitoring Program Advisory Commission (PDMP-AC) has statutory responsibility to:

1. Study issues related to the PDMP,
2. Review the program's Annual Report and make recommendations to the OHA regarding the operation of the program, and
3. Develop criteria used to evaluate program data.

One issue of interest to the health care community is the integration of health services data. The PDMP Advisory Commission considered this issue in 2014. Chris Apgar, the public member information technology expert, presented his analysis of integrating the PDMP with health information exchanges (HIE) at the April 18, 2014 PDMP-AC meeting.⁹ He reported that the lack of HIE standardization, the limited number of successful HIE in the US, and the costs associated with development and on-going maintenance would likely lead to an early PDMP HIE integration failure. The legal barriers related to PDMP data exchange are significant. State law prohibits the exchange of PDMP data and limits who may access it.

Advisory Commission members listened to a grant proposal developed by the Public Health Division's Injury and Violence Prevention Program in response to a Center for Disease Control's National Center for Injury Prevention and Control funding announcement related to preventing prescription drug overdose. The primary activities of the Oregon Rx Overdose Grant Proposal were to expand proactive reporting to providers, maximize the PDMP as a public health surveillance system, and evaluate prescription drug overdose related policy. The PDMP-AC provided a letter of support for the grant proposal.

The Advisory Commission helped develop a key system customization to be implemented in 2015 – a monthly flat file of system use data the program can use to analyze how the system is being utilized. Along with getting data on who ran queries and the dates of those queries, the customization will enable the PDMP system to collect health care provider practice specialty information. The Advisory Commission recommended collecting practice specialty since board certification and licensure practice designations do not necessarily reflect the practice settings where health care providers work. The Advisory Commission determined that a consolidated pick list of approximately 30 provider specialties would capture most practice settings. PDMP staff will use this information to target outreach and tailor training for prescribers.

The Advisory Commission helped the program refine its evaluation research data request procedures to ensure all de-identified data projects are measured against Public Health Division standards including all security, privacy, and confidentiality standards. With increased attention

⁷ Bohnert ASB, Valenstein M, Bair MJ, et al. Association Between Opioid Prescribing Patterns and Opioid Overdose-Related Deaths. *JAMA*. 2011; 305(13):1315-1321.

⁸ Baumblatt JAG, Wiedeman C, Dunn JR, et al. High-Risk Use by Patients Prescribed Opioids for Pain and Its Role in Overdose Deaths. *JAMA Intern Med*. doi:10.1001/jamainternmed.2013.12711. Published online March 3, 2014.

⁹ Apgar C. PDMP-HIT Integration Project & HIE Maturity, 16 April 2014. Web 23 December 2014. http://www.orpdmp.com/orpdmpfiles/PDF_Files/Minutes/PDMP_AC_Minutes_041814.pdf.

to prescription drug overdose, researcher requests for PDMP data have increased. Prescription drug overdose presents a broad spectrum of problems and issues, and evaluation research is needed to determine best practices to address these issues. Given the lack of human resources available to the program, the Advisory Commission sees research partnerships as essential to advance state efforts to identify best practices related to controlled substance use. The processes developed in collaboration with the Advisory Commission will ensure that evaluation research projects align with state efforts related to overdose and with evaluation research best practices, and that all research aims deliver information needed to define PDMP efficacy, impact on clinical practice, impact on patient health outcomes, and impact on community health outcomes.

Evaluation

The PDMP uses evaluation practice to guide the development and ongoing operations of the system, examine how the information impacts clinical practice, generate information to inform policy decisions, and provide information to develop and target prevention efforts. Program evaluation methods include: monthly operational metrics, statewide and county-level data reports, contracted evaluation services, and a five-year National Institutes of Health (NIH) grant.

As part of a Department of Justice (DOJ), Bureau of Justice Assistance (BJA) Harold Rogers PDMP grant, the OHA contracted with Program Design and Evaluation Services (PDES) to conduct: a) Health system key informant interviews to learn how to implement PDMP use policies; and b) Patient record reviews to study the impact of PDMP use on clinical practice. For the key informant interviews, PDES has met with a variety of clinic and health system administrative staff – i.e. quality improvement managers, medical directors, nurse directors, physicians, and project managers. These interviews were recorded and transcribed for future qualitative analysis. For the patient record review project, PDES has identified two clinic partners and began to develop the methodology for conducting these reviews. The clinic partners include the Oregon Community Health Information Network (OCHIN) and a CODA methadone substance abuse treatment clinic. OCHIN is a non-profit collaboration of public and private health systems in Oregon with an electronic health record management system. De-identified data will be analyzed for health care impacts such as addiction treatment referrals, depression screening, and urine analysis testing.

The NIH grant was awarded to Oregon Health and Sciences University (OHSU) and Acumentra Health, Inc. to evaluate Oregon's PDMP. The program partners with OHSU and Acumentra to explore three study aims: a) Determine the prevalence and characteristics of PDMP users and non-users; b) Understand how and when providers use PDMP data to intervene with patients and make clinical decisions, and use this information to offer recommendations to inform the development of clinical guidelines; and c) Compare whether PDMP users have better patient outcomes than non-users. The work for 2014 focused on the third aim to prepare data for analysis and develop code to explore patient outcomes. In 2015, the team will analyze dispensation patterns associated with incidence of overdose and the impact of PDMP use on clinical practice. Findings will be used to assess the utility of the PDMP, target outreach, and

tailor education campaigns and training tools. The research project had two manuscripts accepted by peer-reviewed journals in 2014. The first contains results from a survey conducted in 2013 with system users and non-users to explore the utility of the PDMP tool.¹⁰ The second provides a qualitative analysis of how the PDMP is used within the clinical practice setting based upon key informant interview with health care providers.¹¹

Collaborations and Partnerships

The PDMP collaborated with Jackson County to create a prescriber dashboard report to help physicians identify patients at increased risk for overdose. The teams collectively established the risk indicators, and the program worked with the system vendor to develop a customized automated system report. The dashboard reports will contain a line list of patients who meet one or more of the following high-risk overdose indicators: a) Opioid prescriptions at or greater than 120 milligrams MED per day; b) Methadone prescriptions at or greater than 40 milligrams per day; c) Co-prescribed opioid and benzodiazepine prescriptions; d) Opioids prescribed for three or more consecutive months; and e) Prescriptions from four or more prescribers and pharmacies within a 6-month time frame. Dashboards will denote which of these indicators were met for each patient listed. The names of the patients will be hyperlinked so a system user can click on the name to pull up a detailed 6-month report on that patient to examine potential risk factors. This customization is expected to be implemented in 2015.

The program partners with Coos County's Coordinated Care Organization (CCO) Western Oregon Advanced Health (WOAH) on a performance improvement project to support safe prescribing. Coos County Mental Health prescribers developed a policy to limit the co-prescribing of opioids and benzodiazepines. The policy includes checking the PDMP before prescribing a benzodiazepine. The program will provide WOAH with county-specific PDMP data on co-prescribed opioids and benzodiazepines to see how the policy has impacted practice – i.e. whether or not unwarranted co-prescribing has declined. The intent of the project is to use the data to guide best practice.

The program partners with the Oregon Coalition for Responsible Use of Meds (OrCRM) to promote PDMP use. The OrCRM is a Statewide Coalition launched to prevent overdose, misuse and abuse of amphetamines, benzodiazepines, and opioids among Oregonians. Coalition representation includes leaders from state agencies and non-profits whose work takes place throughout the entire state. Shared areas of work include the implementation of prescribing guidelines, increased use of the PDMP, patient education on the dangers of prescriptions drugs, the promotion of non-opioid pain management strategies, and improved access to addictions treatment services. In 2015, the OrCRM will convene a series of regional summits to assess the

¹⁰ Irvine JM, Hallvik SE, Hildebran C, Marino M, Beran T, & Deyo RA. Who uses a prescription drug monitoring program and how? Insights from a statewide survey of Oregon clinicians. *The Journal of Pain* 2014 Jul; 15(7):747-55.

¹¹ Hildebran C, Cohen DJ, Irvine JM, Foley C, O'Kane N, Beran T, Deyo RA. How Clinicians' Use of Prescription Drug Monitoring Programs: A Qualitative Inquiry, *Pain Medicine*, 2014 Jul; 15(7):1179-86.

scope of the problems associated with controlled substances and the various efforts underway to address these problems.

In December 2014, the program presented at the CCO Quality and Health Outcomes Committee (QHOC). QHOC is a committee comprised of the CCO medical directors and other clinical experts. Its purpose is to create opportunities for peer-to-peer learning and networking, identify and share information on evidence-based best practices and emerging best practices, and help advance innovative strategies in all areas of health system transformation. The goal of this collaboration is to identify how PDMP use guidelines can be implemented as best practice within CCO prescribing guidelines. Tracy Muday, MD, who is the physician representative for the PDMP Advisory Commission and WOA Medical Director, will serve as the QHOC chair beginning in 2015.

The program partners with the Center for Disease Control's National Center for Injury Prevention and Control (NCIPC; the Injury Center). The Injury Center provides support and technical assistance to states to address the main drivers of the prescription drug overdose epidemic, particularly the inappropriate prescribing and use of opioid pain relievers. The Injury Center emphasizes advancing "upstream" interventions that prevent dependency, abuse, and overdose due to prescription opioid pain reliever use. The program provides data and conducts prescription drug overdose surveillance activities to help identify ways to improve clinical practice.

Finally, the program continues to partner with the DOJ BJA through the Harold Rogers PDMP grant program. The purpose of the Harold Rogers PDMP grant program is to plan, implement, and enhance prescription drug monitoring programs to prevent and reduce the misuse of prescription drugs. The program is working on its third grant award to enhance Oregon's PDMP. In addition to the other grant projects noted above, the program is developing online training modules to help health care providers use the PDMP to improve practice and patient health outcomes.

Barriers and Needs

The legislative intent of the PDMP as a tool to inform prescribing practice and improve patient health outcomes has not been realized due to a lack of health system adoption. System use increased in 2014, in large part due to office staff being allowed access on behalf of a provider. Nevertheless, with approximately 7 million controlled substance prescriptions entered into the database annually, the number of system users (9,904 at the end of 2014) and the number of queries conducted (810,996 during 2014) appear inadequate to address the safety concerns associated with these controlled substances. If private and public health systems adopt prescribing guidelines for chronic, non-cancer pain patients and PDMP use guidelines¹², a significant improvement in patient safety and clinical outcomes is expected.

¹² Oregon Pain Guidance. Southern Oregon Opioid Prescribing Guidelines, February 2014. <http://www.southernoregonopioidmanagement.org/opioid-prescribing-guidelines/>.

Program evaluation data indicate that prescribers want information pushed out to them so they are informed when one of their patients is at increased risk for adverse outcomes, but the law does not permit these unsolicited notifications. Prescribers or their delegates have to log into the system and request the information. This practice does not fit well within the typical clinical practice workflow.

As the system has matured, the program has had to assess staff resources. The program identified a need for additional staff to work with researchers to facilitate PDMP evaluation research. The program has hired a research analyst for a limited duration period to address this need.

Issues on the Horizon

- Interstate data sharing – Oregon health care providers continue to express the desire to have access to PDMP information from other states. This is a particular concern in communities bordering other states. While Oregon statute allows for the PDMP to share information with other state PDMPs, the OHA must first determine that the confidentiality, security, and privacy standards of the requesting state are equivalent. This determination would require extensive planning and testing conducted by state shared services and/or contracted personnel with significant information technology security and privacy expertise.
- Real-time reporting – Federal agencies continue to offer grant funds to state PDMPs to encourage “real-time” reporting by pharmacies – i.e. close-to-point-of-sale reporting of data. The costs of this system customization are yet to be determined.
- PDMP integration with EHR/HIE – As noted above under Barriers and Needs, access to the PDMP needs to fit better within the clinical practice workflow. Integrating the PDMP with an EHR/HIE would streamline the process by eliminating the need for logging out of an electronic health care system and/or entering separate login credentials, but some serious concerns exist in regard to the security and privacy of the data within the context of Oregon’s PDMP law. Costs to integrate these systems and sustainability issues also call into question the viability of this option at this time – see the Advisory Commission Activities section above for more details on this topic.
- US DEA lawsuit – In 2012, the PDMP, as an agency of the State of Oregon, filed a lawsuit against the United States Drug Enforcement Administration (DEA) to determine its rights and obligations in complying with administrative subpoenas to produce PDMP information. State law requires that law enforcement requests be accompanied by a court order based upon probable cause – that a subpoena is not sufficient. The American Civil Liberties Union of Oregon (ACLU) argued that PDMP patient data was protected health information and that it was protected by Fourth Amendment rights. In February 2014, the United States District Court of Oregon granted summary judgment stating a DEA administrative subpoena to obtain prescription records from the PDMP violates the Fourth Amendment. The DEA filed its appeal to this ruling in October 2014. The State of Oregon and the ACLU filed its appellee brief in response to the appeal in December 2014. The Oregon Medical Association, along with the American Medical Association and eight other state medical associations, filed an amicus brief in support of the summary judgment. The Oregon DOJ expects a hearing in 2015.

- The PDMP is partnering with OrCRM to support six regional Prescription Drug Abuse Summits in Oregon in 2015. The summits will convene leaders of CCOs, practitioners, treatment specialists, law enforcement, and other local stakeholders. The PDMP will seek to complete three objectives with local attendees: a) Define a local plan to implement PDMP use guidelines; b) Define a local plan to implement prescribing guidelines; and c) Identify local members for a treatment task force.

Discussion

In 2014, the Oregon Prescription Drug Monitoring Program (PDMP) continued to make progress to increase system utilization. Efforts to enroll the 4,000 most frequent prescribers of controlled substance medications, including one-on-one outreach, resulted in 2,618 (66 percent) with PDMP accounts. This effort will continue to be a focus for the program, not only to increase system utilization but also to evaluate the effect that system use has on clinical practice and patient care outcomes.

Overall system use increased by 30 percent to more than 800,000 patient queries by health care providers and pharmacists. While the number of patient queries conducted by MDs decreased by eight percent (22,306 fewer queries), the decrease was mitigated by delegate access (95,198 patient queries). This shift indicates that health care providers are taking advantage of the legislative change allowing office staff to access patient information on their behalf – a process more in line with the typical clinical practice workflow. Another significant factor in overall increased system use was pharmacist use, which increased by 38 percent (100,519 more queries). This increase is driven by chain pharmacies such as Wal-Mart and Walgreens that require pharmacists to conduct queries when dispensing specified controlled substances. The program will continue to work with the Coordinated Care Organizations through the Quality and Health Outcomes Committee to explore similar PDMP use policies for prescribers. The program will also work to improve the quality and accessibility of PDMP information through efforts such as the development of an automated patient overdose at-risk indicator report.

There was a continued downward trend in 2014 in the number of patient-requested reports sent to third-party providers. Seventeen patient-requested reports were sent to third-party providers, as compared to 24 in 2013 and 55 in 2012. Behavioral health care providers are not allowed access to the PDMP, but they can work with their patients to obtain information that can impact their therapeutic approaches. Patients in substance abuse treatment, particularly those with chronic, non-cancer pain, are a population in need of more informed, better coordinated care. The PDMP could prove beneficial to improve health outcomes for these patients.

After three years of operation, it is clear that evaluation research is valuable for informing program operations and understanding and mitigating problems associated with system use. Collaborative work conducted with partners illustrates how the PDMP data can be used to assess the impact that system use has on clinical practice. However, more needs to be done to assess how this impact may affect patient health outcomes. Work with researchers to evaluate the

PDMP is essential to this end, but additional staff is needed to provide researchers with the data necessary to conduct informative program and system evaluation research.

Recommendations

Recommendations were developed from the information gathered from business operations, reports, and evaluation efforts.

- Assess and address PDMP staff resource needs.
- Institutionalize an evaluation research vetting process with the PDMP Advisory Commission as a preliminary step that also includes:
 - Review and approval of data use agreements
 - Vetting researchers
 - Vetting research aims to determine merit
 - Review and sign off on Institutional Review Board proposals
 - Monitoring research projects
 - Closeout procedures on research projects
- Complete an annual process that prepares a PDMP data file for evaluation research and epidemiologic assessment.
- Establish a new target to sign up 90 percent of the 4,000 most frequent controlled substance prescribers to access the PDMP.
- Initiate the adoption of PDMP use guidelines in health systems.
- Increase the number of substance abuse treatment providers using voluntary patient reports in treatment plans.
- Discuss necessary elements, possible challenges, and possible benefits of interstate data sharing with Washington's Prescription Monitoring Program.