



Oregon Prescription Drug Monitoring Program

2012 Annual Report
to the PDMP Advisory Commission

Oregon
Health
Authority

PUBLIC HEALTH DIVISION
Prescription Drug Monitoring Program

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Prescription Drug Monitoring Program
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Executive Summary

In 2009, the Oregon Legislature passed Senate Bill 355 mandating the Oregon Health Authority to 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. The PDMP provides authenticated system users who can prescribe or dispense controlled substances electronic 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.

Findings

By the end of 2012, more than 98 percent of pharmacies required to report data to the PDMP had uploaded information into the system, and almost 95 percent of reporting pharmacies reported within the seven-day statutory limit.

As of December 31, 2012, more than 5,200 health care providers and pharmacists were authenticated users with active PDMP accounts ([Figure 1](#)).

In 2012, health care providers and pharmacists conducted more than 280,000 system queries ([Figure 2](#)); system users conducted on average 14 queries each month ([Figure 3](#)).

In August 2012, the number of patient reports sent to third-party providers on behalf of patients surpassed the number sent directly to patients ([Figure 4](#)).

In 2012, approximately seven million prescriptions for Schedules II-IV controlled substances were dispensed by retail pharmacies to Oregonians; of these, 52 percent were for opioids. Benzodiazepines were the second-most-often prescribed class of medication.

Between October 1, 2011 and March 31, 2012, almost 109,000 Oregonians received prescriptions for both an opiate and a benzodiazepine ([Table 2](#)).

Approximately 60 percent of the prescriptions listed in the PDMP database were written by a cohort of 2,000 prescribers; 59 percent of these prescribers have active accounts ([Figure 5](#)).

Between October 1, 2011 and March 31, 2012, less than 1,850 patients filled prescriptions written by five or more providers and dispensed by five or more pharmacies; almost 898,000 patients received at least one prescription ([Table 3](#)).

Provider Recommendations

In a survey conducted in May 2012 to assess the overall benefit and usefulness of the PDMP, the top recommendation of registered system users was to allow clinical support staff to have delegated access to the PDMP system ([Evaluation](#)).

Introduction

This report serves to satisfy Oregon statute that requires the Oregon Health Authority to annually submit a report to the Advisory Commission regarding the Prescription Drug Monitoring Program (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 PDMP program, assess its utilization, answer questions about its impact on clinical practice and patient outcomes, and determine – if possible – what, if any, impacts the system might have on community health.

Operations

In 2012, the Oregon Prescription Drug Monitoring Program (PDMP) completed its first full year of operation. The program monitors metrics to evaluate and improve business processes. The operation of the system is guided by program objectives that establish priorities, time frames, and targets that guide staff activities. Copies of monthly, year-to-date and to-date business operation reports can be found at <http://www.orpdmp.com/reports.html>.

Basic Metrics

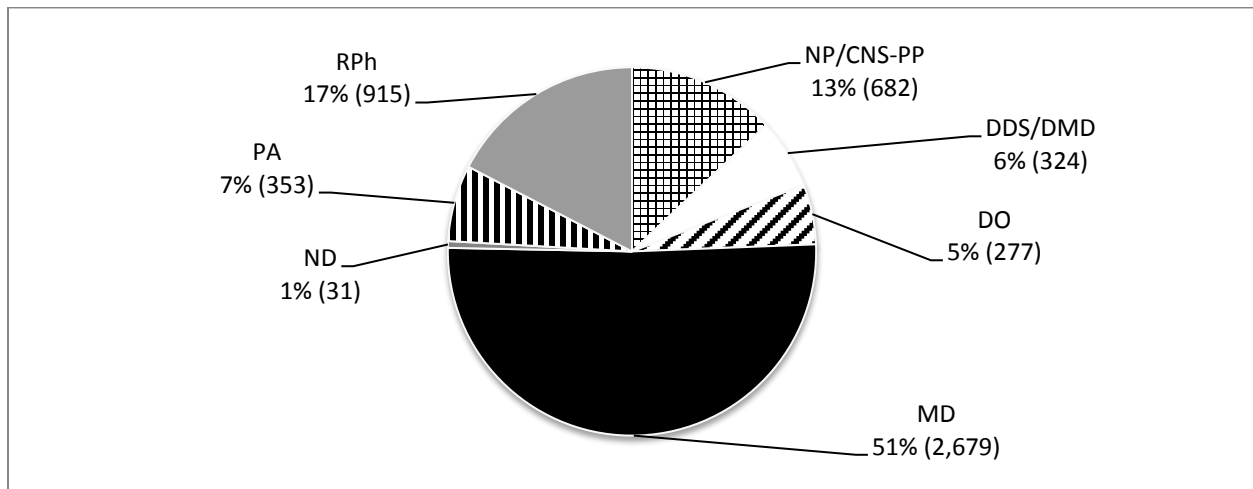
Pharmacy Reporting Compliance

Pharmacy participation increased steadily in 2012. By December of 2012, 98 percent of pharmacies have uploaded data into the system. This is an increase from 89 percent reporting compliance at the end of 2011. Compliance with seven-day reporting requirements increased from 76 percent at the beginning of 2012 to 95 percent at the end of the year.

Number of PDMP System Users

As of December 31, 2012, 5,270 authenticated system users had active accounts. Physicians (MDs) comprised the highest number of health care providers with accounts with 2,679 (Figure 1).

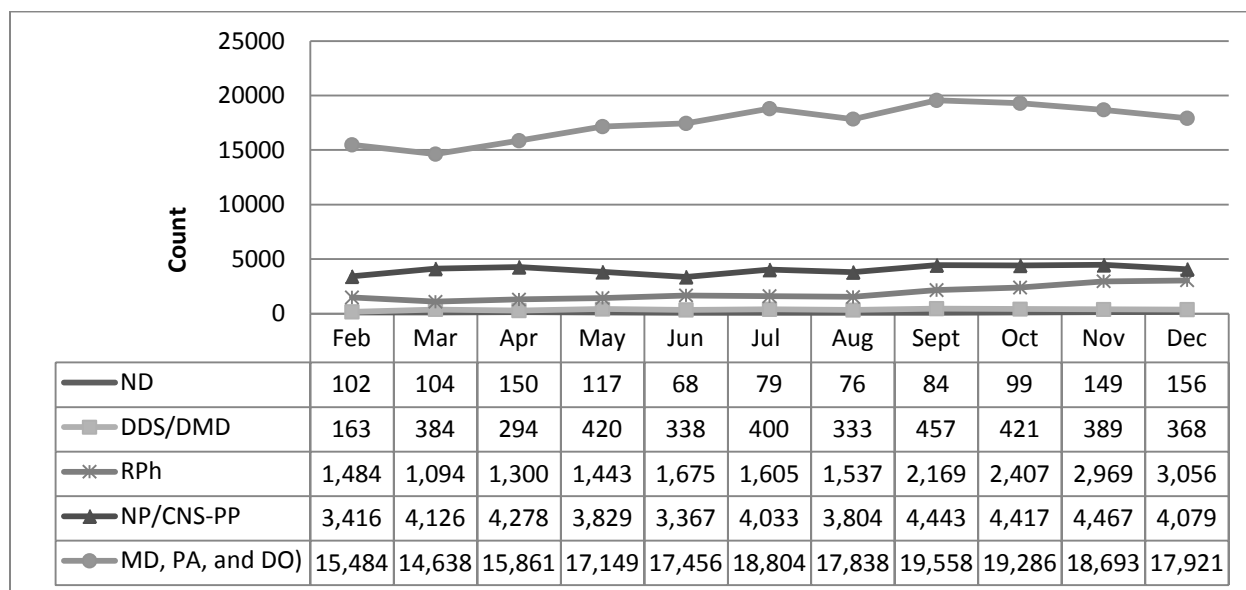
Figure 1. PDMP system accounts by discipline, Oregon, Sept 2011 to December 2012, N=5,270



Utilization of PDMP System

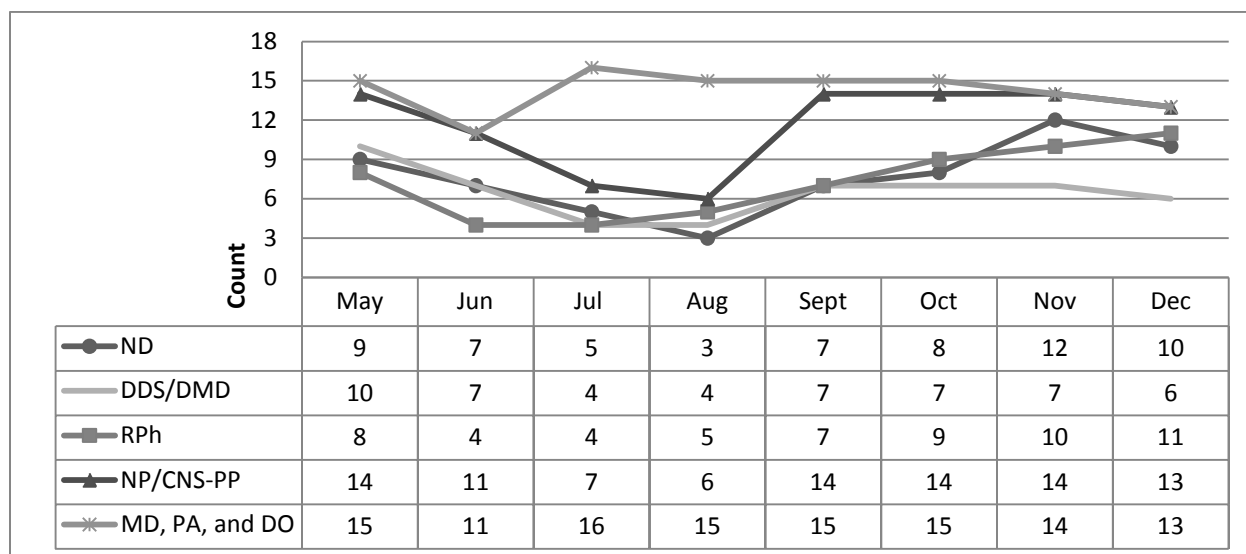
In 2012, health care providers and pharmacists conducted 281,343 system queries. The overall number of system queries conducted each month increased from 20,649 in February to 25,580 in December (Figure 2).

Figure 2. Number of PDMP queries by discipline, Oregon, Feb. – Dec. 2012, N=262,837



The average number of queries made each month by those using the system is illustrated in Figure 3.

Figure 3. Average monthly number of PDMP system queries per querying user by discipline, Oregon, May – Dec. 2012



Outreach to Enroll Health Care Providers and Pharmacists

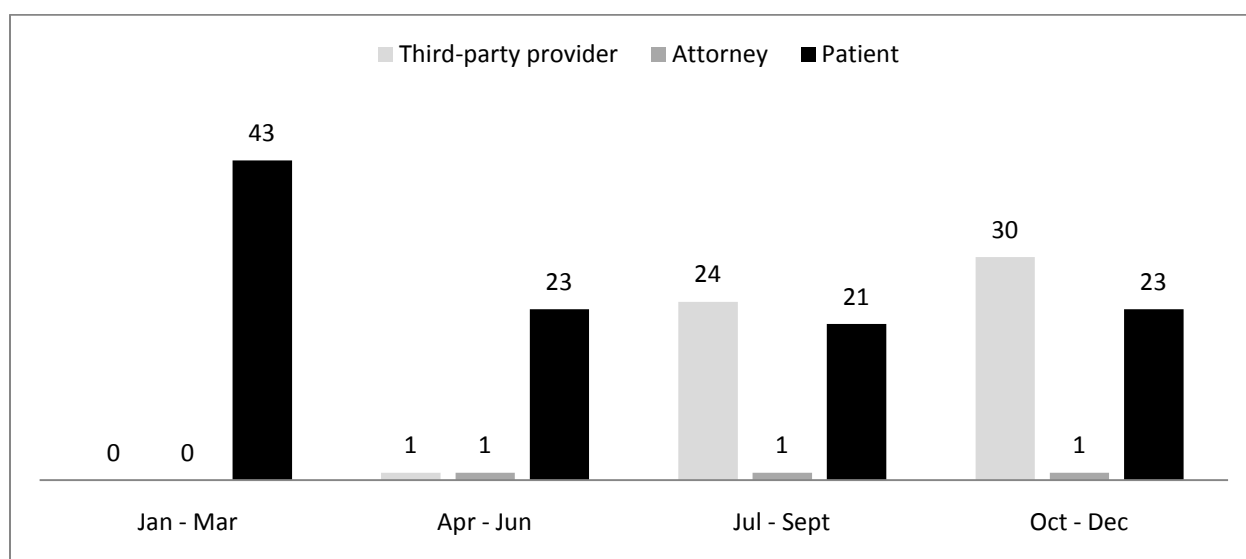
The program hired eight temporary outreach specialists to recruit and enroll system users using federal funds from the Bureau of Justice Assistance Harold Rogers PDMP grant program. The outreach specialists worked from September 2011 to March 2012 and contacted almost 3,500 health care workers including practitioners, pharmacists, clinic managers and other health care

system administrators. Three outreach specialists were rehired in September 2012 to continue efforts through March 2013 to increase enrollment among the cohort of prescribers who write controlled substance prescriptions most often.

Patient Report Requests

PDMP staff processed 168 patient report requests in 2012. Almost two-thirds of the reports were sent directly to patients while the remainder were sent upon patient request to third-party providers (33 percent) and attorneys (2 percent). Since August 2012, the number of patient reports sent to third-party providers surpassed the number sent directly to patients (Figure 4).

Figure 4. Number of patient record requests by recipient type, Oregon, Jan. – Dec. 2012, N=168



Additionally, statute requires that the program respond to patient requests within ten business days of receipt of the request. In 2012, the program responded to requests within one day of receipt 94 percent of the time. The longest time for response was three days for a single request.

PDMP System Customizations

The PDMP has a variety of ways to collect feedback from system users: a program email address and phone line, a technical Help Desk supported by the system vendor, outreach specialists who connect directly with health care providers, and an early assessment survey distributed by a contracted evaluator. Two main issues of access and use of the PDMP system were identified: application notarization and logon problems tied to passwords. The program instituted measures to address these issues.

The system vendor added an automated reminder that is generated after an applicant completes the first step in creating an account – i.e. completing an online application form. The automated reminder prompts the applicant to print a copy of the application form and to have it notarized prior to sending it to the PDMP office. Additionally, PDMP staff are able to reprint a copy of the

online application and send it to applicants when they inadvertently fail to print out the application in the first step of creating an account. The vendor also added an online password reset function and a logout button that allows a user to re-access the system using only their password if they do not close out their browser.

Program Objectives

Table 1. Program objectives, status and next steps, Oregon, 2012.

Objective 1 – 100 percent of pharmacies required to upload data into the PDMP submit reports.	
Measure	Monthly report from PDMP vendor Health Information Designs, LLC
Status	Ongoing – to date more than 98 percent have uploaded data
Next steps	PDMP staff will monitor compliance monthly, continue outreach, and facilitate work between the vendor and pharmacies to resolve technical issues.
Objective 2 – 100 percent of pharmacies submit data reports weekly.	
Measure	Monthly report from PDMP vendor Health Information Designs, LLC
Status	Ongoing – to date 95 percent are reporting at least weekly
Next steps	PDMP staff will monitor compliance monthly and continue outreach – focus will be on resolving zero reporting issues.
Objective 3 – Process 100 percent of patient record requests within two days of receipt.	
Measure	Quarterly review of PDMP Patient Record Request Tracking Database
Status	Ongoing – In 2012, more than 99 percent were processed within two days.
Next steps	PDMP staff will conduct outreach with behavioral health care providers to work with their patients and utilize patient reports to aid in care.
Objective 4 – Increase the percent of registered prescribers who are among the cohort prescribing 60% of the controlled substances from 55 percent in September 2012 to 100 percent by 2017.	
Measure	Quarterly report from PDMP data system
Status	Ongoing – 59 percent were signed up as of December 31, 2012
Next steps	PDMP staff will incorporate the assistance of local health officials and health systems. Coordinated Care Organizations (CCOs) will also be targeted for outreach.
Objective 5 – Support the PDMP data work group.	
Measure	Number of meetings held
Status	Ongoing – The PDMP data work group met 8 times in 2012.
Next steps	The PDMP data group will explore how to measure system use.
Objective 6 – Develop and support a local health department (LHD) work group.	
Measure	Number of meetings held
Status	Ongoing – to be developed
Next steps	PDMP staff will work with the Coalition of Local Health Officials (CLHO) to form a LHD work group to explore practice guidelines.
Objective 7 – Develop a toolkit that provides information on resources that help address the various issues associated with controlled substances.	
Measure	Toolkit deliverable with link on PDMP Website
Status	Completed – a copy of the controlled substance toolkit can be found at http://www.orpdmp.com/health-care-provider-resources.html
Next steps	PDMP staff will package and disseminate the toolkit to appropriate stakeholder groups – CCOs, large health care systems, and LHDs will be targeted.
Objective 8 – Analyze data to examine acute and chronic pain prescribing.	
Measure	PDMP data report
Status	Ongoing – to be developed
Next steps	The PDMP data work group will analyze by 8/30/2013.

PDMP Data

The PDMP produced its first set of semi-annual statewide and county-level data reports in November 2012 – see select data (Table 2). These reports examine the dispensing of the most-often prescribed controlled substances. The reports were distributed to local health officials. The reports can be used to inform, develop, implement, and analyze population-based prevention approaches to reduce prescription drug overdose, such as public information campaigns and clinical guidance. A copy of the statewide report can be found at <http://www.orpdmp.com/reports.html>.

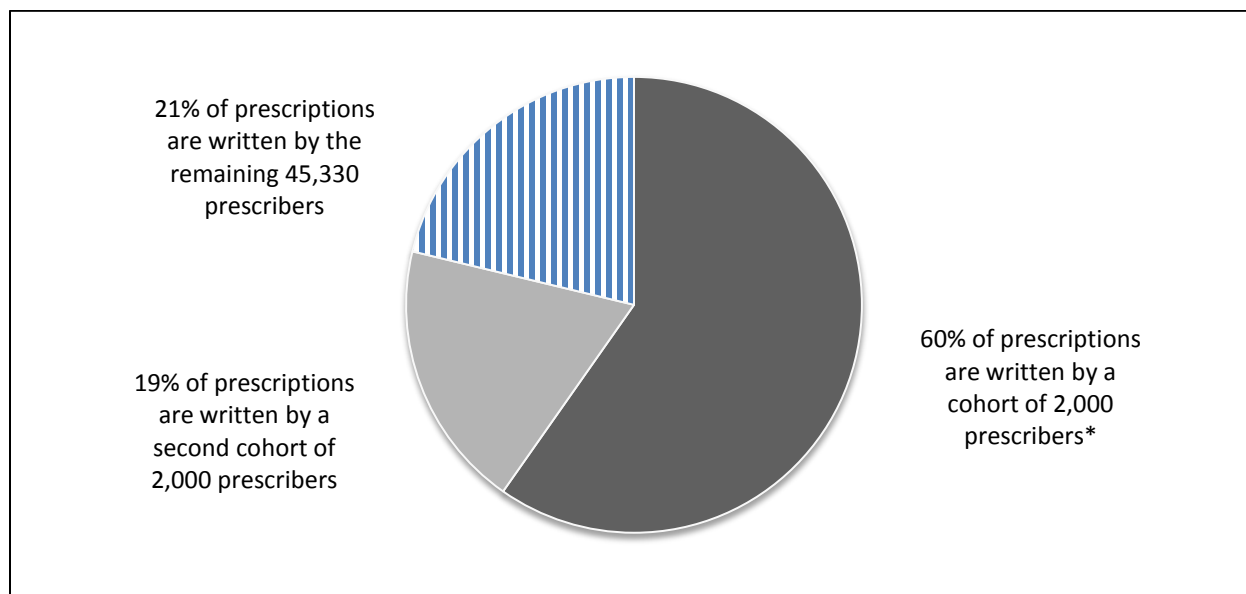
Table 2. Select controlled substances, Statewide, Oregon, 10/01/11 to 03/31/12

Controlled Substance	Prescription Recipient Count in 6 months	Number of prescriptions dispensed in 6 months	Number of prescriptions dispensed per prescription recipient in 6 months	Number of people receiving prescription, per 1,000 residents	Number of prescriptions dispensed per 1,000 residents
Opioids¹	611,985	1,872,534	3.1	158.6	485.4
Hydrocodone	438,275	1,030,866	2.4	113.6	267.2
Oxycodone	213,500	577,689	2.7	55.3	149.8
Morphine	29,160	119,231	4.1	7.6	30.9
Methadone ²	14,268	64,674	4.5	3.7	16.8
Fentanyl	11,009	44,265	4.0	2.9	11.5
Hydromorphone	14,366	34,664	2.4	3.7	9.0
Benzodiazepines³	315,554	985,821	3.1	81.8	255.6
Zolpidem	97,351	278,591	2.9	25.2	72.2
Lorazepam	88,701	212,393	2.4	23.0	55.1
Alprazolam	71,665	193,408	2.7	18.6	50.1
Clonazepam	50,267	168,286	3.3	13.0	43.6
Diazepam	45,045	95,724	2.1	11.7	24.8
Temazepam	12,748	37,292	2.9	3.3	9.7
Opioid-Benzo Combo⁴	108,766	475,746	4.4	28.2	123.3

¹Opioids include: Hydrocodone, Oxycodone, Morphine, Methadone, Fentanyl, and Hydromorphone.
²Does not include methadone used to treat addiction.
³Benzodiazepines include: Zolpidem, Lorazepam, Alprazolam, Clonazepam, Diazepam, and Temazepam.
⁴Opioids include all listed above. Benzodiazepines include all listed above except Zolpidem which represents a chemically different class of benzodiazepine, and in which the risk of combination with opioids is thought to be somewhat lower.

Sixty percent of the prescriptions listed in the PDMP database were written by a cohort of 2,000 prescribers; 59 percent of these prescribers had active accounts (Figure 5).

Figure 5. Percentage of total CS II-IV prescriptions written by prescriber cohort, Oregon, 1/1/12 to 9/30/12, n=49,330



* Fifty-nine percent of these prescribers were authenticated system users as of 12/31/12.

PDMPs in the U.S. commonly monitor system data to determine the extent to which patients are engaging in “doctor shopping” – a patient obtaining controlled substances from multiple health care providers without the prescribers’ knowledge of the other prescriptions. Patients who obtain prescriptions from five or more prescribers at five or more pharmacies are thought to exceed normal patterns of controlled substance use (Table 3).

Table 3. Count of patients filling prescriptions from multiple prescribers at multiple pharmacies, Oregon, 10/1/11 to 3/31/12

Count of Providers/Pharmacies	Count of patients*
5 - 9 providers and pharmacies	1,746
10 - 14 providers and pharmacies	69
15 or more providers and pharmacies	18

*A total of 897,815 patients received at least one prescription during this same timeframe.

Evaluation

Statute requires evaluation of the PDMP system. Program evaluation provides information that helps guide the improvement of clinical practice, addresses information needs of policy makers, and provides information for the development and targeting of prevention efforts.

The PDMP is evaluated a number of ways: through monthly metrics, by the data work group through statewide and county-level data reports, by contracted evaluation services, and through a five-year National Institutes of Health grant awarded to Acumentra Health and Oregon Health and Sciences University.

Early Assessment Survey

In May 2012, Program Design and Evaluation Services (PDES) conducted a survey to assess the overall benefit and usefulness of the PDMP. Overall, respondents had positive opinions about the promise of the program. They either agreed or strongly agreed that the program would:

- Likely improve management of patient prescriptions for controlled substances (92 percent)
- Engender interest for most providers and pharmacists for registering as users (92 percent)
- Likely increase communication between providers (80 percent)
- Likely have impact (82 percent)

The top reasons indicated for using the system were:

- To assess controlled substance use for patients who might be over using (86 percent of providers and 71 percent of pharmacists), and
- To assess controlled substance use of new patients (72 percent of providers and 59 percent of pharmacists).

About two in three system users indicated that the program had been “very helpful”:

- To monitor patients’ controlled substances prescriptions (65 percent), and
- To control “doctor shopping” (64 percent).

About two in three system users indicated that as a result of using the system they communicated more with:

- Patients (79 percent)
- Providers who write prescriptions (67 percent)
- Clinicians and staff inside my practice (64 percent)
- Pharmacists (63 percent)

The most important barriers to more frequent use of the system, as documented by those indicating suggested barriers were a “large” or “medium” barrier, included:

- Not enough time (40 percent)
- Lack of access for support staff (31 percent)
- System not being easy to use (17 percent)

Provider Recommendations

Registered providers gave suggestions for system improvements. Important themes included:

- Allow support staff to have PDMP system access (#1 theme)
- Encourage wider participation
- Make login and overall interface easier to use and more responsive (i.e. faster)
- Improve technical issues related to registering (i.e. drop the notarization portion of the application process)
- Allow for information to be more up-to-date

To view complete survey results go to <http://www.orpdmp.com/reports.html>.

Discussion

Program operations for the first 18 months established a secure data system, accessible 24/7, with 95 percent of pharmacies uploading data as required by statute. However, adoption of this system is slow – only 5,270 health care providers have enrolled and use the system. Evaluation data identified the most significant barriers to system enrollment as the perception that there is not enough time to use the system and poor experiences trying to navigate the account request process. The vendor and staff worked to decrease systemic failures in the account request process, but there are statutory constraints on how health care providers can integrate the data into practice. Health care practice workflow typically relies on medical assistants and nurses to prep patients and patient information before appointments. Health care providers report the need to delegate the PDMP patient report query to their assistants who do many other tasks. A statutory change would be needed to address this issue.

Patient report requests are processed by staff within required timeframes, and the number of patient requested reports increased monthly. A full third of patient requested reports directed PDMP staff to send the report to a third party. This type of patient request is expected to increase as drug and alcohol treatment providers and mental health providers learn how they can obtain a patient report by asking their patients to request reports.

PDMPs use a common metric to monitor doctor shopping. In Oregon's PDMP data we observed fewer than 2000 cases (among 898,000) where an individual's prescriptions from a variety of prescribers and picked up at a variety of pharmacies exceeded thresholds. It will be important to know if over time these patterns continue, if they grow, and what kinds of medicines are most often identified by the doctor shopping metric.

Evaluation data have been useful for understanding and correcting problems that health care providers experienced with the system implementation. If the PDMP is to realize its promise, the program will need to identify patient care and community health outcomes to monitor.

Recommendations

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

- Assure that the top cohort of prescribers have system accounts.
- Engage local public health officials in efforts to increase use of prescribing guidelines and practice improvements, and promote system enrollment in their jurisdictions.
- Disseminate information about the PDMP system and helpful resources through licensing boards and health care provider associations.
- Produce and disseminate a tool for system users on how to use PDMP reports with patients.
- Explore how to better incorporate the PDMP into the clinical workflow.
- Improve information access for behavioral health treatment providers.

- Engage county substance abuse prevention specialists to disseminate public information.
- Continue evaluation activities aimed at measuring community health outcomes.
- Work with health care systems and CCOs to integrate PDMP use into health care practice.