



2013-2014 Prescription Drug Monitoring Program Annual Report

Rick Scott
Governor

John H. Armstrong, MD, FACS
State Surgeon General & Secretary

Rebecca Poston, BPharm, MHL
Program Manager

E-FORCSE®
4052 Bald Cypress Way, Bin C-16
Tallahassee, FL 32399
(850) 245-4444 x 3700

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Executive Summary

As required by section 893.055(8), *Florida Statutes* (F.S.), the 2013-2014 Prescription Drug Monitoring Program (PDMP) Annual Report highlights the accomplishments of the PDMP in achieving the following outcomes: reduction of the rate of inappropriate use of prescription drugs through Department of Health (DOH) education and safety efforts; reduction of the quantity of pharmaceutical controlled substances obtained by individuals attempting to engage in fraud and deceit; increased coordination among interested parties participating in the PDMP; and involvement of stakeholders in achieving improved patient health care and safety and reduction of prescription drug diversion.

Controlled Substance Reporting - By the end of February 2014, more than 90 percent of pharmacies required to report data to the PDMP had uploaded information into the system within the seven-day statutory limit. During this reporting period, approximately 35 million prescriptions in schedules II through IV were dispensed (Table 4) by retail pharmacies to 6.6 million Floridians, of which 17 percent were for schedule II (Table 3).

Increase in Utilization and Registration - The number of prescribers and dispensers that have registered for access to the E-FORCSE[®] Prescription Drug Monitoring System (PDMS) has increased 16 percent and the number of Patient Advisory Reports (PARs) requested increased 64 percent (Table 8). Eighteen percent of the in-state prescribers who issued more than one controlled substance prescription have registered to use the database (Table 2, Table 8).

Reduction in Morphine Milligram Equivalents per Patient (MMEs) - There has been a 20.1 percent reduction in the average MMEs prescribed between October 2011 and December 2013 (Figure 5). Evidence suggests that a patient receiving more than 100mg MMEs is nine times more likely to overdose with 12 percent resulting in death.¹

Reduction in Multiple Provider Episodes (MPEs) (Reducing Doctor Shopping) - Through monitoring and analysis of prescribing and dispensing data, Florida has seen a 53 percent reduction in the number of individuals engaging in MPEs (Figure 7).

Zohydro Use on the Rise - The number of individuals receiving one or more prescriptions for Zohydro ER increased 77 percent since March 2014 (Figure 9).

Reduction in Overdose Deaths - The *Drugs Identified in Deceased Persons by Florida Medical Examiners 2013 Annual Report*² shows an 8.3 percent decrease in the number of deaths in which one or more controlled substance prescriptions was identified as the primary cause of death, while oxycodone deaths declined by 27.3 percent (Figure 10) and overall drug deaths fell by 7.3 percent when compared with 2012.



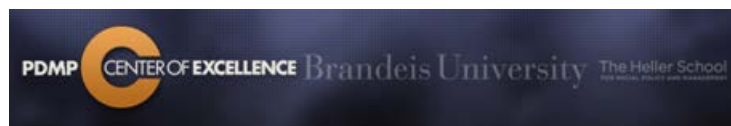
Acknowledgements

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The 2013-2014 PDMP Annual Report was prepared in collaboration with the University of Florida, College of Medicine, Department of Pathology, Immunology and Laboratory Medicine and the Department of Health Outcomes and Policy. The PDMP has contracted with UF through its 2013 Harold Rogers Prescription Drug Monitoring Program Data-Driven Multi-Disciplinary Approaches to Reducing Rx Abuse Grant award 2013-PM-BX-0010. Through this collaboration, the PDMP has focused on measures that best demonstrate the impact of the PDMP on the prescription drug abuse epidemic in Florida.

The PDMP would like to acknowledge the PDMP Center of Excellence at Brandeis University for its role in creating the Prescription Behavior Surveillance System (PBSS). The PBSS collects and analyzes de-identified PDMP data from participating states to help target and evaluate interventions aimed at reducing prescription drug abuse and diversion. Florida was the first PDMP to enter into a Memorandum of Understanding to participate in this analysis and the development of meaningful measures to evaluate prescription drug abuse and diversion. Many of the PBSS measures have been incorporated into the 2013-2014 PDMP Annual Report. PBSS is funded by grants from the Centers for Disease Control and Prevention and the Food and Drug Administration, and administered by BJA.

The PDMP would like to thank the Florida Department of Business & Professional Regulation (DBPR), Division of Drugs, Devices and Cosmetics, for providing Zohydro ER sales data from its Controlled Substance Registry.



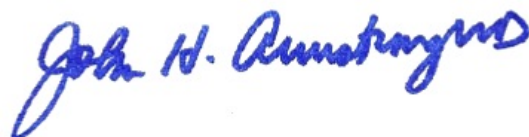
Message from the State Surgeon General and Secretary of Health

Florida's 2013-2014 PDMP Annual Report highlights the accomplishments of the PDMP in reducing abuse, misuse and diversion of controlled substance prescription drugs. This year the PDMP has helped Florida achieve remarkable health successes.

Florida's PDMP, E-FORCSE[®], has proven to be an effective tool to protect public health and safety, while supporting sound clinical prescribing, dispensing, and use of controlled substances. Information maintained in the database can help identify sources of prescription drug diversion such as prescription fraud, forgeries, and improper prescribing and dispensing. Evidence continues to validate Florida's PDMP as effective in improving clinical decision-making, reducing multiple provider episodes and preventing diversion of controlled substances and assisting in other efforts to curb the prescription drug abuse epidemic. The usefulness of Florida's PDMP is reflected in a significant increase in registration and utilization.

Today, there are over 125 million controlled substance prescription dispensing records maintained in the database. In the first three years of operation, physicians and dispensers made more than 10.6 million requests to view their specific patients' controlled substance dispensing history. Law enforcement has requested and received more than 43,000 investigative reports from program staff to assist in active criminal investigations involving controlled substances.

While promising progress has been made, we have more work to do for elimination of prescription drug abuse and misuse in our great state.



John H. Armstrong, MD, FACS
Surgeon General & Secretary



Introduction

Background - The Prescription Drug Abuse Epidemic

Addiction overdoses and deaths involving non-medical prescription drug use, especially narcotic pain relievers, have risen dramatically over the last decade.³ This report will show that Florida experienced a steady rise in oxycodone-caused death rates since 2005 and peaked in 2010 (8.0 per 100,000). In the subsequent three years, the rate decreased to 2.7 per 100,000 (2013), the lowest since 2003 (Figure 1).

In 2009, one in eight deaths in Florida was attributable to a prescription drug overdose.⁴ Drug-related poisonings were the leading cause of death in 2012 in the United States.⁵ The number of overdose deaths involving prescription opioids has more than tripled since 1999; in 2010 these deaths were greater than those involving heroin and cocaine combined.⁶ A recent study estimated that in 2007 the total cost in the United States of prescription opioid abuse was \$55.7 billion.⁷

Figure 1 highlights major changes in the prescription drug abuse epidemic since the program was created.

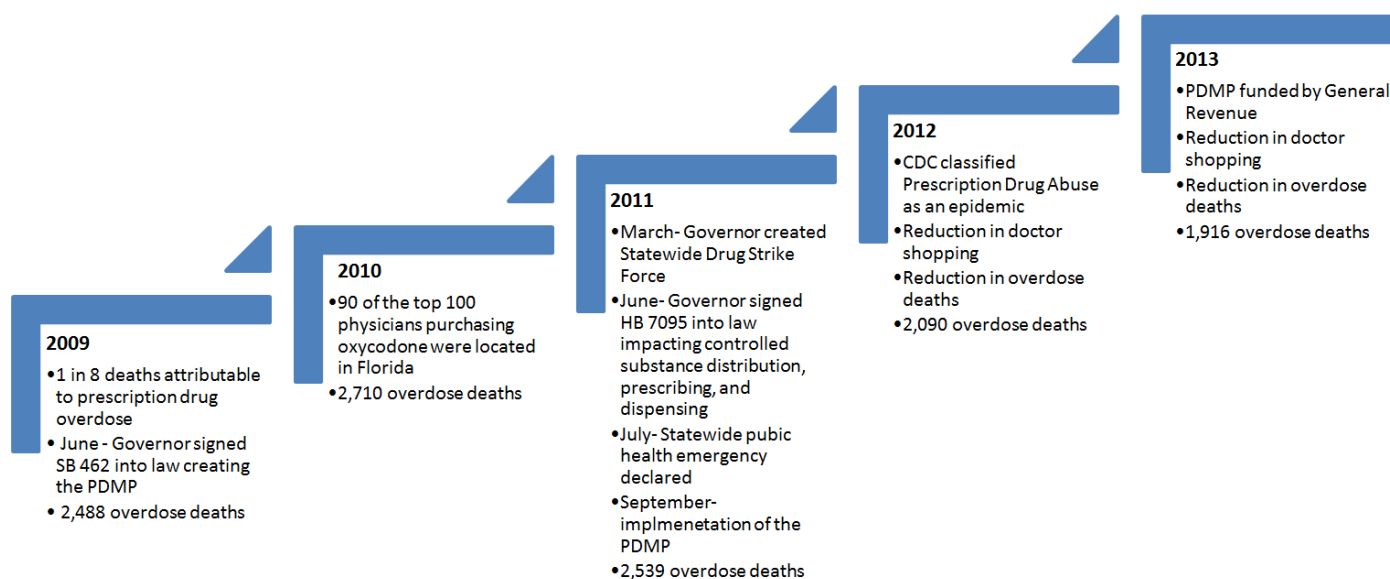


Figure 1. Timeline

PDMPs collect, store, monitor, and analyze prescribing and dispensing data submitted by pharmacies and dispensing practitioners.⁸ Research and accumulated experience strongly suggest that PDMPs serve essential functions in combating the prescription drug abuse epidemic. They can help identify major sources of prescription drug diversion such as prescription fraud, forgeries, doctor shopping and improper prescribing and dispensing. They are also important resources for practitioners, providing them information on patients' use of controlled substances, critical for providing good medical care and ensuring patient safety.⁹

Legal Framework

Summary of Statute

Section 893.055, F.S., creates the PDMP within DOH and requires DOH to design and establish a comprehensive electronic database system to collect controlled substance prescription dispensing information, while not infringing upon the legitimate prescribing or dispensing of controlled substances by a prescriber or dispenser acting in good faith and in the course of professional practice. Table 1 summarizes PDMP legislation passed from 2009 through 2014.

Table 1. History of PDMP legislation by year and bill number

Year	Bill Number	Summary of Changes
2009	SB462	Created section 893.055, F.S., which establishes the PDMP.
	SB440	Created section 893.0551, F.S., which sets forth the exemption from public records requirements for information contained in the PDMP.
2010	SB2772	Amended sections 893.055 and 893.0551, F.S., which established a definition for "program manager," and requires the program manager to work with certain stakeholders to promulgate rules setting forth indicators of controlled substance abuse. It also authorized the program manager to provide relevant information to law enforcement under certain circumstances.
2011	HB7095	Amended section 893.055, F.S., to reassign the duties of the Governor's Office of Drug Control to DOH; to require reports be made to the PDMP within 7 days of dispensing rather than 15 days; to prohibit the use of certain funds to implement the PDMP; and to require criminal background screening for all PDMP staff who have direct access to the PDMP.
2013	HB1159	Appropriated \$500,000 of nonrecurring general revenue funds for the general administration of the PDMP for fiscal year 2013-2014.
2014	HB7177	Amended sections 893.055 and 893.0551, F.S., renewing the public record exemption and requiring law enforcement and investigative agencies to enter into a user agreement with the DOH. In addition, it limits the information shared with a criminal justice agency and requires the disclosing person or entity take steps to ensure the continued confidentiality of the information, redacting any non-relevant information at a minimum. Finally, any information related to a criminal case shared with a state attorney may only be released in response to a discovery demand and any unrelated information requires a court order to be released.

The law establishes the type of information that must be reported by a pharmacy or dispenser that dispenses a controlled substance within seven days of dispensing. It also establishes exemptions from reporting to the PDMP.

A pharmacy, prescriber, or dispenser may access information in the PDMP that relates to a patient of that pharmacy, prescriber, or dispenser for the purpose of reviewing their specific patient's controlled substance prescription history. Prescribers and dispensers acting in good faith for receiving or using information from the program are immune from any civil, criminal, or administrative liability.

Other access is limited to the program's manager and designated program staff. Confidential and exempt information in the database is only released as provided in section 893.0551, F.S.



The following entities do not have direct access to the information in the database, but may register to request information from the program manager or support staff:

- DOH or appropriate health care regulatory boards who are involved in a specific investigation involving a specific individual for one or more prescribed controlled substances;
- The Attorney General for Medicaid fraud cases involving prescribed controlled substances;
- A law enforcement agency during active investigations regarding potential criminal activity, fraud or theft relating to prescribed controlled substances; or
- A patient, legal guardian or designated health care surrogate who submits a notarized written request, for the purpose of verifying the information collected.

The law requires DOH to enter into a user agreement with a law enforcement agency prior to disclosing confidential and exempt information requested during an active investigation involving a specific violation of law regarding prescription drug abuse or diversion of prescribed controlled substances. Before disclosing the information to a criminal justice agency, the disclosing person or entity must redact any nonrelevant information. The agency or person obtaining the information must maintain the confidential and exempt status of that information. A state attorney may release confidential and exempt information obtained from the Attorney General or law enforcement agency only in response to a discovery demand, if related to the criminal case. A court order is required to release any unrelated information.

Florida PDMP Funding

Florida's PDMP uses federal and private grant money and funds raised by the PDMP Foundation Board of Directors to sustain its operation. With the exception of a one-time general revenue appropriation by the legislature of \$500,000 for FY 2013-14, no state funds support the PDMP. Further, the law prohibits the use of funds received directly or indirectly from prescription drug manufacturers. In 2014, as the result of a multistate settlement, Attorney General Pam Bondi contributed \$1.973 million to the Florida PDMP Foundation, Inc., to fund E-FORCSE for the next four years.

Since its inception in 2010, the PDMP has spent \$2,022,549 for database infrastructure and enhancements, personnel and facility expenses. Brief descriptions of the funding sources are as follows:

- The PDMP Foundation is the primary source of revenue to cover database operation and infrastructure, personnel and facility expenses. The Foundation's fundraising efforts are ongoing.
- Federal grants are another source of funds to operate the PDMP. Awards are based on specific projects outlined in the grant application and only a limited portion (if any) may be used to offset personnel and facility expenses. DOH applied for and was awarded four Harold Rogers PDMP grants totaling \$1,599,250. DOH also received the Substance Abuse and Mental Health Services Administration's (SAMHSA) 2012 Cooperative Agreement for PDMP Electronic Health Record Integration and Interoperability Expansion for \$240,105.
- The final source of funding is private grants. DOH has received three grant awards from the National Association of State Controlled Substance Authorities (NASCSA) totaling \$49,952. The grant period ended June 30, 2011, and \$44,886 was drawn down.



Effectiveness of Florida's PDMP

As a recipient of federal grant funds, Florida is required to report quarterly and semi-annual performance measures to BJA and SAMHSA. In addition, through this report the PDMP reports annually to the Governor and Legislature on statutorily mandated outcomes. The measures document various performance metrics including number of prescribers and dispensers registered to use the PDMP, number of solicited and unsolicited reports sent to authorized users, the number of individuals meeting thresholds associated with multiple provider episodes and the number of prescriptions they have obtained and a calculation of daily morphine milligram equivalents (MMEs) for opioid pain relievers.

Evidence continues to accumulate validating Florida's PDMP as effective in improving clinical decision-making, reducing multiple provider episodes and diversion of controlled substances and assisting in other efforts to curb the prescription drug abuse epidemic. The effectiveness of Florida's PDMP is reflected in a significant increase in registration and utilization resulting in a decrease in multiple provider episodes, decrease in morphine milligram equivalents, and reduction in overdose deaths.

Increase in Utilization and Registration

PDMPs may be one of the most effective tools utilized to safeguard public health and reduce prescription drug abuse and diversion. There has been an increase in coordination among partners such as health care professionals, law enforcement and regulatory boards and other agencies. In the last year, there has been a 16 percent increase in prescriber and dispenser registration and a 64 percent increase in the number of requests for Patient Advisory Reports (PARs).

According to Brandeis University PDMP Center of Excellence (COE), data collected from multiple states has demonstrated that the number of prescribers who actually issue one or more controlled substance prescriptions is significantly less than the number registered with the Drug Enforcement Administration (DEA). For example, several PDMPs have found that only about two-thirds of DEA-registered prescribers issue controlled substance prescriptions in a year¹⁰.

In light of this information, COE developed a PDMP Management Tool, which recommends calculating the number of in-state prescribers with PDMP accounts as a percentage of the number of in-state prescribers who issued controlled substance prescriptions during the prior year. Based on this calculation, 18 percent of the in-state prescribers who issued more than one controlled substance prescription have registered to use the database (11,408 in-state prescribers with PDMP accounts / 62,238 in-state prescribers who issued controlled substance prescriptions during the prior year).

Reduction in Morphine Milligram Equivalents per Patient (MMEs)

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the reduction of morphine milligram equivalents. Morphine is widely regarded as the 'gold standard' for the treatment and management of moderate to severe pain and, therefore, is used as the reference point for other opioids.¹¹ Studies have shown that opioid usage for more than three months can lead to tolerance and dependence resulting in higher dosages being prescribed to the patient. As dosage increases, the likelihood of an adverse reaction increases. Evidence suggests that a patient, receiving more than 100mg



MMEs, is nine times more likely to overdose with 12 percent of those resulting in death.¹² Identifying at-risk patients is a crucial first step towards improving patient safety and increasing prescriber awareness. The MME performance measurements may help identify the number of patients who may be at risk for abuse and ensure patients treated with opioids receive the appropriate dose and quantity of medication for their condition and assist in efforts to address overdoses and deaths from opioid medications. There has been a 20.1 percent reduction in the average MMEs prescribed between October 2011 and September 2014.

Reduction in Multiple Provider Episodes (MPE) (Reducing Doctor Shopping)

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of individuals obtaining controlled substances from multiple providers and pharmacies. States often use unsolicited reports to proactively alert prescribers when certain prescribing and dispensing thresholds are reached.¹³ Through monitoring and analysis of multiple provider episodes (MPE), Florida has seen a 53 percent reduction in the number of individuals having multiple provider episodes. A multiple provider episode is defined as use of five or more prescribers and five or more pharmacies within three months. Using the data in this performance measure demonstrates the value of the PDMP as a clinical decision making tool to reduce prescription drug abuse, misuse and diversion. Data supports that as registration and utilization of E-FORCSE by prescribers and dispensers increases, the number of multiple provider episodes decreases.

Zohydro Use on the Rise

The PDMP had an opportunity to collaborate with the DBPR, Drugs, Devices and Cosmetics Program, Controlled Substance Registry (Controlled Substance Registry) to improve patient health care safety and reduce prescription drug abuse and diversion. The Controlled Substance Registry collects and stores controlled substance receipts and distributions in its registry. Section 499.0121(14), F.S., requires each prescription drug wholesale distributor, whether in state or out-of-state, retail pharmacy drug wholesale distributor, manufacturer, or repackager that engages in the wholesale distribution of controlled substances to report receipts and distributions of controlled substances listed in schedule II through V, as provided in s. 893.03, F.S., monthly by the 20th of the next month. As of September 2014, there are currently 313 Floridians using Zohydro ER, a 77 percent increase in its use since it came on the market.

Florida wholesale distributors began shipping Zohydro Extended Release to pharmacies at the end of February.¹⁴ Zohydro (hydrocodone bitartrate) Extended Release is a schedule II narcotic indicated for the management of pain severe enough to require daily, around-the-clock, long-term treatment and for which alternative treatment options are inadequate.¹⁵ It is available in 10mg, 15mg, 20mg, 30mg, 40mg, and 50mg capsules.¹⁶ The dosage form does not have any of the new and popular tamper-resistant technologies (e.g., matrix doesn't dissolve easily, or a coating that is difficult to crush).¹⁷ Sales data obtained from DBPR when compared to de-identified dispensing data may be used to assess changes in distribution trends, identify abuse, misuse, and diversion. Used in combination with other data sources, the PDMP is a valuable tool to improve population health, to assess the magnitude of the problem and monitor implementation of health programs and changes in the law.

Reduction in Overdose Deaths

The involvement of stakeholders in achieving improved patient health care, safety, and reduction of prescription drug abuse and prescription drug diversion can be measured in terms of the number of deaths reported by the Florida Medical Examiners where a controlled substance prescription drug was the primary or contributing cause of death. The *Drugs Identified in Deceased Persons by Florida Medical Examiners 2013 Annual Report*¹⁸ shows an 8.3 percent decrease in the number of deaths in which one or more controlled substance prescriptions was identified as the primary cause of death, while oxycodone deaths declined by 27.3 percent and overall drug deaths fell by 7.3 percent when compared with 2012.

Performance Measures

Section 893.055(8), F.S., requires DOH to report its outcomes annually to the Governor, the President of the Senate, and the Speaker of the House of Representatives.

Technical Notes

The current report covers the period October 1, 2013 to September 30, 2014 (2014). Year-to-year comparisons in the report are based on the current period compared to October 1, 2012 to September 30, 2013 (2013). In order to maintain consistency in the reported numbers from year-to-year moving forward, analytic datasets for each reporting period were created and archived for future reference. Discrepancies in counts provided in previous reports when compared to counts from the analytic dataset from the same period are minimal (<1 percent) and do not significantly affect interpretation. Unless otherwise specified, data refer to Florida residents only, that is, individuals whose state of residence was known and reported as Florida.

To assist in fulfilling program responsibilities, DOH has identified and is reporting performance measures related to its efforts to reduce the rate of inappropriate use of prescription drugs through education and safety efforts; reduce the quantities of pharmaceutical controlled substances obtained by individuals attempting to engage in fraud and deceit; and to increase coordination among partners and stakeholders to achieve improved patient health care and safety and reduce prescription drug abuse and drug diversion.

1. OUTCOME: Reduction of the rate of inappropriate use of prescription drugs through DOH education and safety efforts.

- A. PERFORMANCE MEASURE: The number of licensed prescribers, dispensers, and authorized law enforcement officers trained in the use of the state's PDMS.

The reduction in the rate of inappropriate use of prescription drugs through DOH education and safety efforts can be measured in terms of the number of individuals who have received education on registration and utilization of the database. E-FORCSE staff continued its outreach and educational efforts to prescribers and dispensers by encouraging registration and use of the database. Prescribers and dispensers received formal and informal training (e.g. attendance at a continuing education conference or exhibition at a statewide association meeting) on the registration and PAR request processes. Authorized users from law enforcement agencies received formal and informal training on the proper use of the confidential and exempt controlled substance prescription information requested and received from E-FORCSE staff.



Table 2. The number of individuals trained in the use of Florida's PDMP, by reporting period

Individuals Trained to Use E-FORCSE	2013 (No.)	2014 (No.)	Change (%)
Licensed prescribers in the state	107,775	112,442	4.3%
Licensed prescribers in the state that issued one or more controlled substance prescriptions	60,728	62,238	3.2%
Licensed prescribers out-of-state that issued one or more controlled substance prescription	146,444	147,068	0.4%
Licensed prescribers formally and informally trained in the use of E-FORCSE	12,822	14,029	9.4%
Licensed pharmacists in the state	27,330	28,749	5.2%
Licensed pharmacists formally and informally trained to use E-FORCSE	14,753	8,282	-43.9%
Certified Law Enforcement Officers	49,418	49,769	0.7%
Individuals authorized to conduct investigations formally and informally trained to request & receive information	3,094	2,677	-13.5%
Individuals visited website www.e-forcse.com	36,864	59,159	60.5%

B. PERFORMANCE MEASURE: The number of dispensers reporting to the PDMS within 7 days of dispensing a controlled substance.

The reduction in the rate of inappropriate use of prescription drugs through DOH education and safety efforts can be measured in terms of the number of dispensers compliant with reporting requirements. Section 893.055, F.S., requires all dispensers who dispense controlled substances listed in schedules II, III, or IV, as defined in section 893.03, F.S., to report to E-FORCSE within 7 days each time a controlled substance is dispensed to an individual, unless it is one of the acts of dispensing or administering which are exempt from reporting under subsection 893.055(5), F.S.

There has been a 3.6 percent increase, from 6,071 to 6,288, in the number of dispensers reporting controlled substance dispensing information to E-FORCSE since the last reporting period. This may be attributed to increased education and outreach efforts as a result of the compliance audit conducted by E-FORCSE staff on May 8, 2014, which revealed that during the period of January 1 through February 28, 2014, 5,213 out of 5,760 (90.5 percent) pharmacies complied with the reporting requirements.

2. OUTCOME: Reduction of the quantity of pharmaceutical controlled substances obtained by individuals.

A. PERFORMANCE MEASURE: The number of prescriptions of controlled substances dispensed to patients in various schedules.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of prescriptions of controlled substances dispensed to



patients in various schedules. Table 3 shows there was a 4.8 percent increase, from 6,291,294 to 6,594,101, in the number of unique individuals receiving controlled substances in schedule II, III or IV when compared to the previous reporting period. On average, when drugs on a single schedule are prescribed, the average number of prescriptions per person is lower (range: 2.1-4.2) when compared to individuals prescribed drugs in multiple schedules (range: 6.2-17.6).

Table 3. The number of unique individuals and average number of prescriptions by controlled substance schedule

Schedule	2013 (No.)	2014 (No.)	Change (%)	2013 Rx per person	2014 Rx per person
Schedule II	1,020,094	1,116,707	9.5%	3.3	3.3
Schedule II and III	314,987	297,958	-5.4%	6.1	6.2
Schedule II, III, and IV	336,758	333,941	-0.8%	17.9	17.6
Schedule II and IV	419,725	436,383	4.0%	11.9	11.5
Schedule III	1,908,093	1,864,748	-2.3%	2.1	2.1
Schedule III and IV	680,942	697,458	2.4%	9.3	9.1
Schedule IV	1,603,066	1,788,021	11.5%	4.5	4.2
Other	7,629	58,885			
Total	6,291,294	6,594,101	4.8	5.4	5.2

B. PERFORMANCE MEASURE: The number of prescriptions dispensed in Florida by state of residence.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the change in average prescriptions per prescriber. Table 4 shows during the last reporting period, 60,728 in-state prescribers issued 33,943,071 controlled substance prescriptions to Florida residents or approximately 559 prescriptions per prescriber. In the current reporting period, 62,238 in-state prescribers issued 34,331,384 prescriptions to Florida residents or approximately 552 prescriptions per prescriber.

Table 4. Number of prescriptions dispensed in Florida by state of residence

Reporting Period	Total Prescriptions Dispensed				Florida Resident Prescriptions/In- state Prescriber
	In-state Prescribers	Florida Residents	Non-FL residents	All	
2013	60,728	33,943,071	893,571	34,836,642	558.9
2014	62,238	34,331,384	918,368	35,249,752	551.6
% change	2.5%	1.1%	2.8%	1.2%	-1.3%

C. PERFORMANCE MEASURE: Percentage of all schedule II-IV controlled substances prescribed per day by providers by decile of total prescribing

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the percentage of all scheduled II through IV controlled substances prescribed per day by providers by decile of total prescribing. Figure 2 shows the percentage of



all daily controlled substances (schedule II-IV) prescribed by decile of total prescribing in the current reporting period. The top one percent of controlled substance prescribers account for approximately 18 percent of total daily prescribing and the top 10 percent of prescribers account for approximately 82 percent of all prescribing. Taken alone, this data is not indicative of medical appropriateness of prescribing only volumes per prescriber.

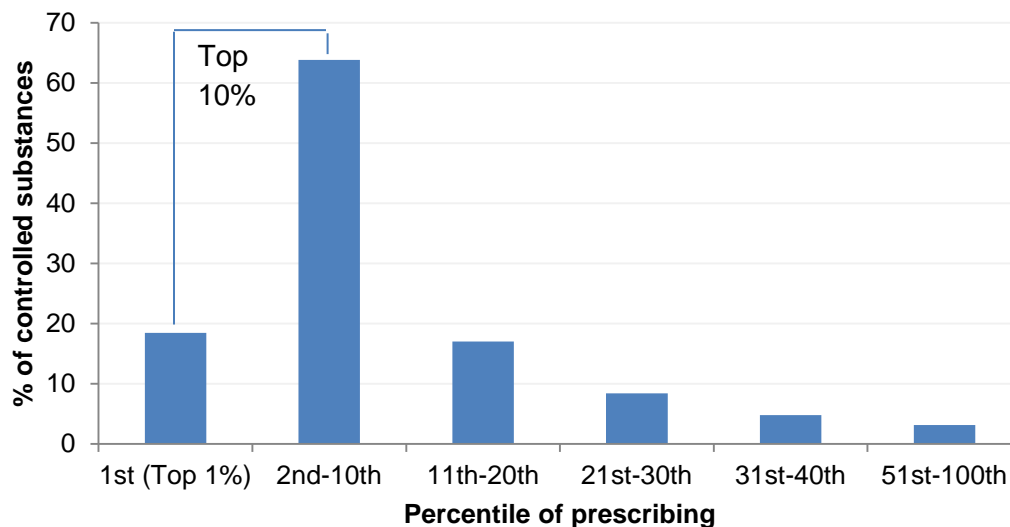


Figure 2. Percentage of all Schedule II-IV controlled substances prescribed per day by providers by decile of total prescribing

D. PERFORMANCE MEASURE: Number of prescriptions and percentage of total prescriptions of the most commonly dispensed controlled substances.

The quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of prescriptions and percentage of total prescriptions of the most commonly dispensed controlled substances. Table 5 shows the rank order by prescription volume of the top 25 dispensed controlled substances.

Hydrocodone with acetaminophen, alprazolam, and oxycodone are ranked the top three most commonly dispensed controlled substances, representing 38.4 percent of the total. Drugs with the largest year-to-year increases in dispensing were buprenorphine/naloxone (10.6 percent) and dextroamphetamine/amphetamine (9.1 percent). Drugs with the largest year-to-year decreases in dispensing were eszopiclone (-44.5 percent) and hydrocodone homatopine (-26.8 percent).

Table 5. The number of prescriptions and percentage of total prescriptions of the top 25 most commonly dispensed controlled substances by generic name, an example brand name and drug class

Generic Name	Drug Class	Brand Example	Rank	2014 No.	%	2013 No.	%	% Change
HYDROCODONE-ACETAMINOPHEN	O	Vicodin	1	6,146,378	17.9	6,288,835	18.5	-2.3%
ALPRAZOLAM	B	Xanax	2	4,308,924	12.6	4,315,762	12.7	-0.2%
OXYCODONE-ACETAMINOPHEN	O	Percocet	3	2,723,100	7.9	2,649,677	7.8	2.8%
ZOLPIDEM	SD	Ambien	5	2,576,170	7.5	2,854,449	8.4	-9.7%
CLONAZEPAM	B	Klonopin	6	1,988,021	5.8	1,910,413	5.6	4.1%
LORAZEPAM	B	Ativan	7	1,714,671	5.0	1,711,868	5.0	0.2%
TEMAZEPAM	B	Restoril	8	1,463,960	4.3	1,423,652	4.2	2.8%
OXYCODONE HYDROCHLORIDE	O	Oxycontin	9	1,324,827	3.9	1,391,407	4.1	-4.8%
DEXTROAMPHETAMINE/AMPHETAMINE	ST	Adderall	10	1,301,550	3.8	1,192,799	3.5	9.1%
PHENTERMINE	ST	Adipex-P	11	1,020,484	3.0	991,697	2.9	2.9%
DIAZEPAM	B	Valium	12	981,089	2.9	993,010	2.9	-1.2%
MORPHINE SULFATE	O	MS Contin	13	927,269	2.7	920,935	2.7	0.7%
BUPRENORPHINE/NALOXONE	O	Suboxone	14	767,351	2.2	694,012	2.0	10.6%
METHYLPHENIDATE	ST	Ritalin	15	629,449	1.8	586,505	1.7	7.3%
LISDEXAMFETAMINE DIMESLYATE	ST	Vyvanse	16	581,450	1.7	539,014	1.6	7.9%
CARISOPRODOL	SD	Soma	17	532,544	1.6	614,073	1.8	-13.3%
TESTOSTERONE	ST	AndroGel	18	520,928	1.5	593,859	1.7	-12.3%
ACETAMINOPHEN-CODEINE	O	Tylenol #3	19	498,911	1.5	520,717	1.5	-4.2%
HYDROMORPHONE	O	Dilaudid	20	429,044	1.2	456,713	1.3	-6.1%
FENTANYL	O	Duragesic	21	389,361	1.1	364,387	1.1	6.9%
METHADONE	O	Methadose	22	324,117	0.9	362,906	1.1	-10.7%
TESTOSTERONE CYPIONATE	ST	Delatestryl	23	313,640	0.9	304,265	0.9	3.1%
HYDROCODONE-HOMATROPINE	O	Hydromet	24	128,922	0.4	176,009	0.5	-26.8%
ESZOPICLONE	SD	Lunesta	25	116,747	0.3	210,225	0.6	-44.5%
OTHER	n/a	n/a	4	2,622,477	7.6	1,875,882	5.5	39.8%
TOTALS				34,331,384		33,943,071		1.1%

* B=Benzodiazepine, O=Opioid, SD=Sedative, ST=Stimulant, rank refers to the current reporting period

E. PERFORMANCE MEASURE: The number of prescription rates of controlled substances by year, by drug class, sex and age group.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of prescription rates of controlled substances by year, by drug class and age group. Figure 3 shows prescribing rates per 1,000 total population of three classes of prescription drugs (opioids, stimulants, and benzodiazepines) observed by sex and age group in 2014. Females are more frequently prescribed opioids for all age groups except the 55-64 year olds when rates are similar. Opioid prescribing begins to decline for males 65 and older. Males under 18 years old are prescribed stimulants at approximately two times the rate of females in this age group. Then, rates begin to decline for males in older age



groups. The trend is different for females as they are increasingly prescribed stimulants with age, with a peak in the 35-44 year old age group. Their stimulant prescription rate surpasses even < 18 year old males. Generally, females are prescribed benzodiazepines at a higher rate than males but both sexes appear to experience a consistent increase in prescribing by age.

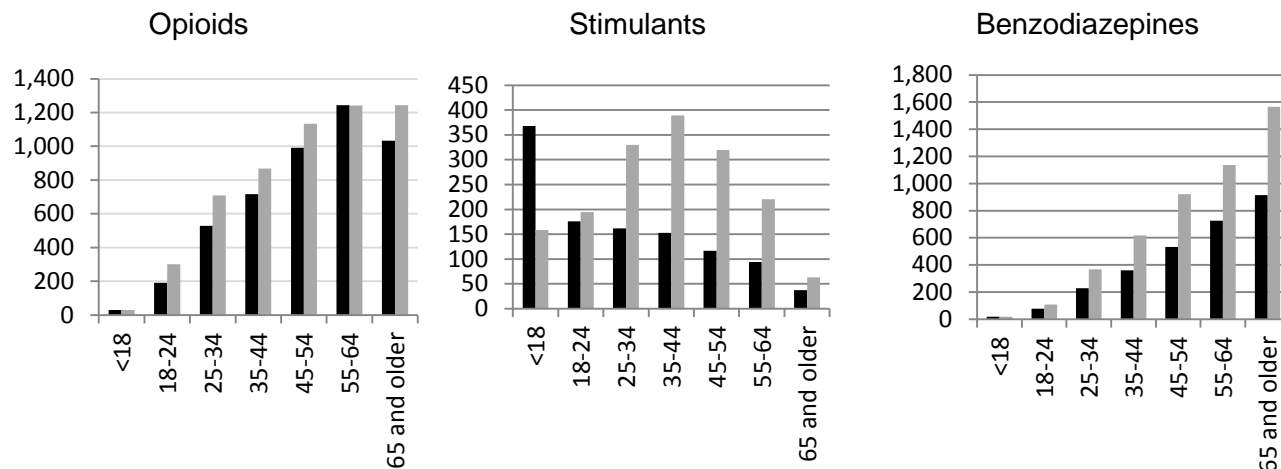


Figure 3. Prescription rate (per 1,000) by drug class, sex and age (males shown in black), current reporting period

F. PERFORMANCE MEASURE: The number of prescription rates by quarter and year, by major opioid category

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of prescription rates by quarter and year by major opioid category. Short-acting (SA) Fentanyl showed the largest increase (35 percent) in the prescribing rate per 1,000 population when compared to the prior reporting period among all major opioids. Buprenorphine and oxycodone prescribing also increased.

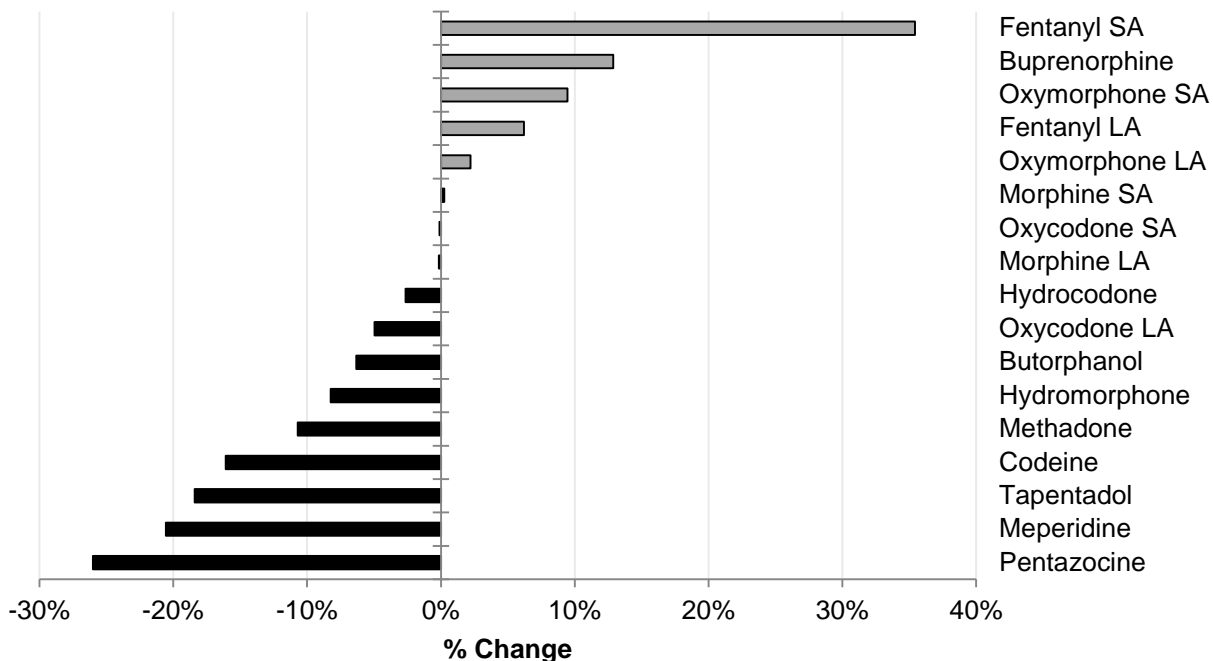


Figure 4. Percentage of change 2013 to 2014 in the prescription rate by major opioid drug category

G. PERFORMANCE MEASURE: The number of prescription rates by quarter and year, by major stimulant drug category.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of prescription rates by quarter and year, by major stimulant category. The amphetamine prescription rate per 1,000 population increased by 11.6 percent from the previous reporting period.

Table 6. Percentage of change 2013 to 2014 in prescription rates by major stimulant drug category

Major Stimulant Drug Category	Change (%)
Amphetamine**	11.6%
Benzphetamine	10.0%
Lisdexamfetamine	7.4%
Methylphenidate	6.9%
Other Stimulants	3.3%
Dexmethylphenidate	-3.2%
Dextroamphetamine	-4.7%

**Includes amphetamine-dextroamphetamine.

H. PERFORMANCE MEASURE: The number of prescription rates by quarter and year, by major benzodiazepines drug category.



The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of prescription rates by quarter and year, by major benzodiazepines drug category. Estazolam prescriptions increased 5.2 percent from the previous reporting period and oxazepam prescriptions decreased 13.2 percent from the previous reporting period.

Table 7. Percentage of change 2013 to 2014 in prescription rates by major benzodiazepine drug category

Major Benzodiazepine Drug Category	Change (%)
Other Benzodiazepines	41.7%
Estazolam	5.2%
Chlordiazepoxide	4.8%
Clonazepam	3.6%
Temazepam	2.4%
Lorazepam	0.2%
Alprazolam	-0.5%
Diazepam	-1.6%
Triazolam	-3.4%
Clorazepate	-8.4%
Flurazepam	-12.0%
Oxazepam	-13.2%

I. **PERFORMANCE MEASURE:** The mean daily dosage per patient in morphine milligram equivalents (MMEs) by quarter and year.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the mean daily dosage per patient in morphine milligram equivalents (MME) by quarter and year. Figure 5 shows the percentage of patients with exposure to higher than 100 morphine milligram equivalents (MME) per day and the mean MMEs for patients receiving opioids. When the PDMP began operating in October 2011, approximately 17.6 percent of patients were exposed to > 100 MME/day and as of the end of the reporting period, 11.9 percent of opioid-prescribed patients had exposure to these doses. The decline in patients receiving these doses is also reflected in the mean MME. The mean MME has declined 20.1 percent from 88.2 MME in 2011 to 70.5 MME at the end of Q3 2014.

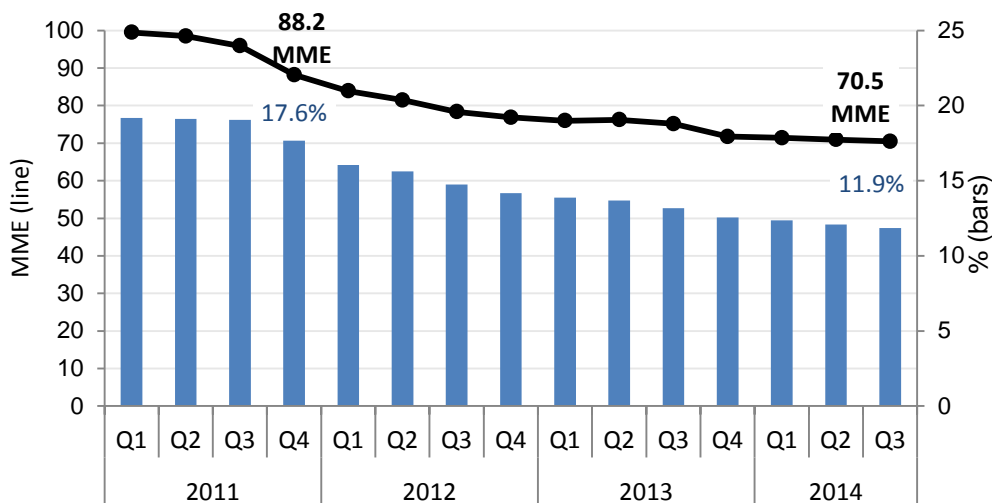


Figure 5. The mean daily dosage per patient in morphine milligram equivalents (MMEs) (line) and the percentage of patients on opioids receiving a dosage >100 MMEs.

State Notes: Florida's PDMP became operational in September 2011. No data are available for 2010 and data for the first three-quarters of 2011 are incomplete. Thus, the data presented for the first three quarters of 2011 should be interpreted with caution.

J. PERFORMANCE MEASURE: Number of individuals by Florida county receiving controlled substances prescriptions and number of controlled substances dispensed.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of individuals by Florida county receiving controlled substances prescriptions and the number of controlled substances dispensed. There has been an overall reduction of 0.5 percent or 29,021 fewer individuals receiving controlled substances and an overall decrease of 0.9 percent or 284,345 less prescriptions dispensed to individuals in Florida counties, when compared to 2013. The data in this figure does not take into consideration controlled substance prescriptions reported for individuals located in counties outside of Florida. Below are examples of the drugs included in each drug class, however the lists are not all-inclusive.

Sedatives include: eszopiclone, flurazepam HCL, secobarbital sodium, temazepam, triazolam, and zolpidem tartrate.

Stimulants include: benzphetamine HCL, dexamethylphenidate HCL, dextroamphetamine sulfate, dextroamphetamine/amphetamine, lisdexamfetamine dimesylate, methamphetamine HCL, methylphenidate, and methylphenidate HCL.

Tranquilizers include: alprazolam, chlordiazepoxide HCL, clonazepam, diazepam, lorazepam, meprobamate, and oxazepam.

Opioids include: buprenorphine, butorphanol, codeine, fentanyl, hydrocodone, meperidine, methadone, morphine, oxycodone, oxymorphone, pentazocine, tapentadol.

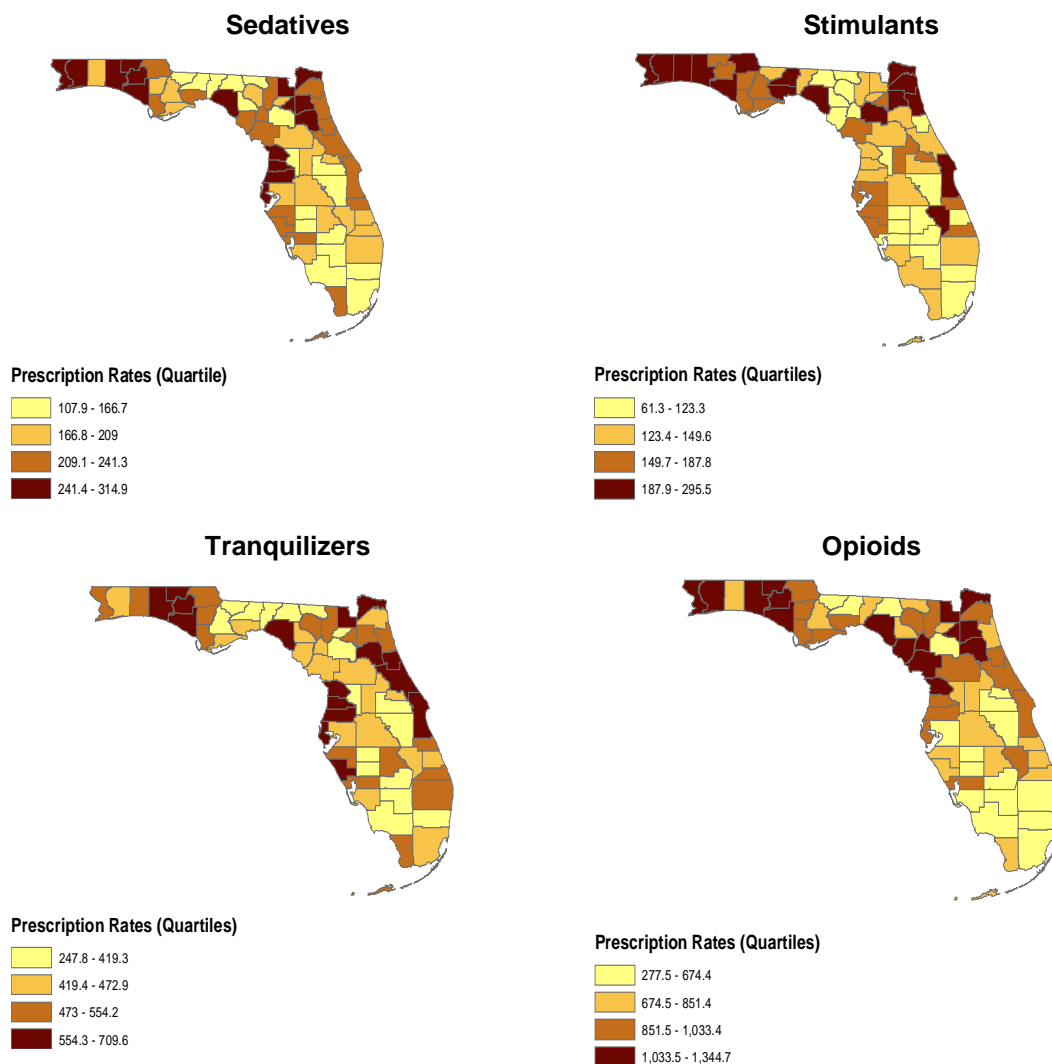


Figure 6. Prescription rate per 1,000 county residents for sedatives, stimulants, tranquilizers, and pain relievers, current reporting period

- K. PERFORMANCE MEASURE: Multiple provider episode rates based on number of individuals visiting x number of prescribers and x number of dispensers in a 90-day period.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of multiple provider episode rates based on the number of individuals visiting x number of prescribers and x number of dispensers in a 90-day period. During the first quarter of E-FORCSE's operation (October 1, 2011 to December 31, 2011), E-FORCSE data indicated there were 2,864 individuals who had one or more prescription drugs prescribed to them by more than five prescribers and dispensed at more than five pharmacies in a 90-day period. By the end of the fourth quarter of 2014 (July 1, 2014 to September 30, 2014), there was a 53 percent reduction or 1,355 individuals visiting more than five prescribers and more than five pharmacies within a 90-day period (Figure 7).

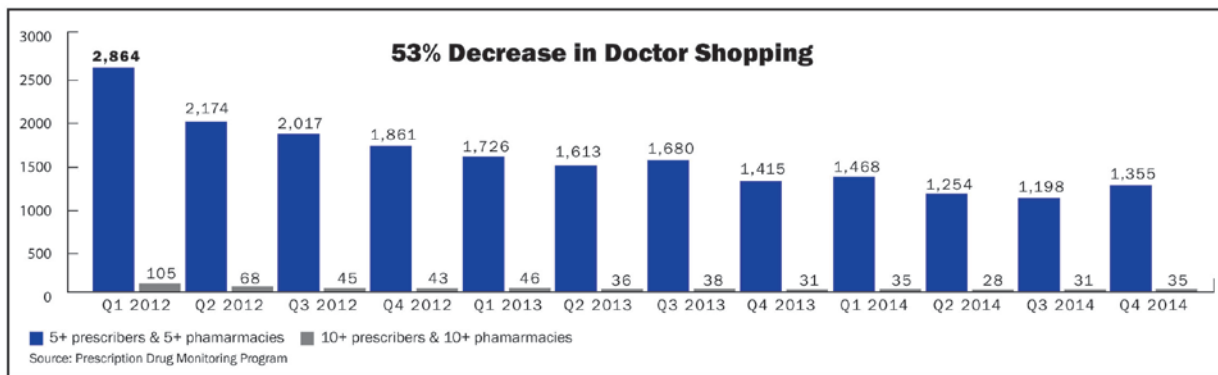


Figure 7. Number of individuals obtaining controlled substance prescriptions in schedules II-IV from 5 (10) or more prescribers and 5 (10) or more dispensers within a 90-day period

L. PERFORMANCE MEASURE: Multiple provider episode rates by quarter and year, by drug schedule and age group.

The reduction in the quantity of pharmaceutical controlled substances obtained by individuals can be measured in terms of the number of multiple provider episode rates by quarter and year by schedule and age group, reported by quarter and year per 100,000 state residents. Multiple provider episodes are defined as a patient receiving and filling a Schedule II prescription at 5 or more prescribers AND 5 or pharmacies within a 3-month period of time.

Multiple provider episodes have declined for all age groups and at the highest rate for ages 35-54 and 18-34 year olds.

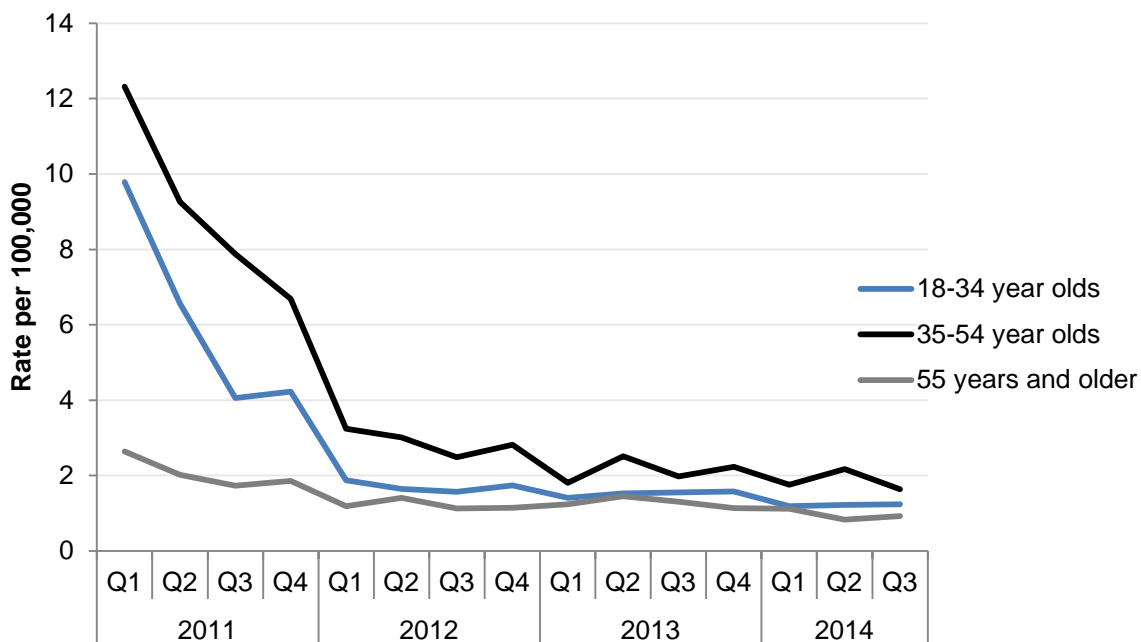


Figure 8. Multiple provider episode rate (per 100,000 residents) for Schedule II drugs by quarter/year and age group



State Notes: Florida's PDMP became operational in September 2011. No data are available for 2010 and data for the first three-quarters of 2011 are incomplete. Thus, the data presented for the first three quarters of 2011 should be interpreted with caution.

3. OUTCOME: Increased coordination among partners participating in the prescription drug monitoring program.

- A. PERFORMANCE MEASURE: The number of authorized users who have requested and received controlled substance dispensing information by user type.

The increased coordination among partners participating in the PDMP can be measured in terms of the number of authorized users who have requested and received controlled substance dispensing information. Prescriber and dispenser registration increased 16 percent, from 23,084 to 27,412, and utilization increased 64 percent from 6,484,624 to 10,619,491, when compared to 2013 (Table 8).

Among all prescribers and dispensers, pharmacists have the highest registration rate, 46.7 percent. Among all prescribers, osteopathic physicians have the highest registration rate, 30.45 percent followed by medical doctors at 13.2 percent (Table 8). Overall, 19.4 percent of all licensed prescribers and dispensers, as defined in section 893.055(1)(d), F.S., have registered to use the database, a three percent increase over last year.

In addition, Table 8 shows pharmacists have the highest utilization rate, 89.4 percent, and have queried the database 6,026,091 times. Furthermore, 71 percent of all prescribers registered to use the database have queried 4,593,400 times. In particular, 6,177 medical doctors who have registered to use the database have queried 3,319,277 times. Overall, 80 percent or 21,994 registered prescribers and dispensers have queried the database 10,619,491 times.

Table 8. Prescriber and dispenser registration and utilization by license type

License Type	Total Licensees (No.)	Registered Users (No.)	Registered (%)	Users that have Queried (No.)	Users that have Queried (%)	Queries (No.)
ARNP	17,843	1,411	7.9%	1,035	73.4%	261,896
DN	12,818	669	5.2%	388	58.0%	10,820
ME	66,385	8,744	13.2%	6,177	70.6%	3,319,277
OPC	748	7	0.9%	2	28.6%	3
OS	6,175	1,880	30.5%	1,416	75.3%	765,131
PA	6,628	1,164	17.6%	907	77.9%	234,318
PO	1,845	108	5.9%	58	53.7%	1,955
PS	28,749	13,429	46.7%	12,011	89.4%	6,026,091
TOTAL	141,191	27,412	19.4%	21,994	80.2%	10,619,491

Key: ARNP- Advanced Registered Nurse Practitioner; DN- Dentist; ME- Medical Doctor; OPC- Certified Optometrist; OS- Osteopathic Physician; PA- Physician Assistant; PO- Podiatric Physician; PS- Pharmacist

Certain law enforcement and investigative agencies may request controlled substance prescription information from the program manager during the course of an active investigation related to prescribed controlled substances. During the reporting period, law enforcement and investigative agencies have appointed 883 users of whom 505 have submitted requests. There has been a 69 percent reduction in the number of requests from 33,173 in 2013 to 10,419 (Table 9).



Table 9. Investigative agency registration and utilization by agency type

Agency	Authorized Users (No.)	Users that have Queried (No.)	Requests 2013 (No.)	Requests 2014 (No.)	Change (%)
Law Enforcement	873	500	32,839	10,320	-68.6%
Attorney General's Medicaid Fraud Control Unit	8	4	110	89	-19.1%
Department of Health Regulatory Board	2	1	224	10	-95.5%
Total	883	505	33,173	10,419	-68.6%

- B. Percentage of the top 200 prescribers who are registered to access the PDMP database and percentage of those registered who have queried patient specific controlled substance dispensing information.

The increased coordination among partners participating in the PDMP can be measured in terms of the percentage of the top 200 prescribers of controlled substances who are registered to access the PDMP and the percentage of those who are registered and who have queried patient-specific controlled substance dispensing information. In Florida, allopathic physicians make up 87 percent (173) and osteopathic physicians 13 percent (27) of the top 200 prescribers of controlled substances; 81 percent (162) of the top 200 prescribers have registered to use the database of which 99 percent (161/162) have queried their specific patients' controlled substance histories.

4. OUTCOME: Involvement of stakeholders in achieving improved patient health care, safety, and reduction of prescription drug abuse and prescription drug diversion.

- A. PERFORMANCE MEASURE: The number of medical examiner reports that indicate controlled prescription drug use as the primary or contributing cause of death.

The involvement of stakeholders in achieving improved patient health care, safety, and reduction of prescription drug abuse and prescription drug diversion can be measured in terms of the number of medical examiner reports that indicate controlled substance prescription drug use as the primary or contributing cause of death. The *Drugs Identified in Deceased Persons by Florida Medical Examiners 2013 Annual Report*¹⁹ shows an 8.3 percent decrease in the number of deaths in which one or more controlled substance prescriptions was identified as the primary cause of death, while oxycodone deaths declined by 27.3 percent and overall drug deaths fell by 7.3 percent when compared with 2012 (Figure 10). The death rate caused by opioids as a whole increased between 2003-2010 and declined in 2011-2013.

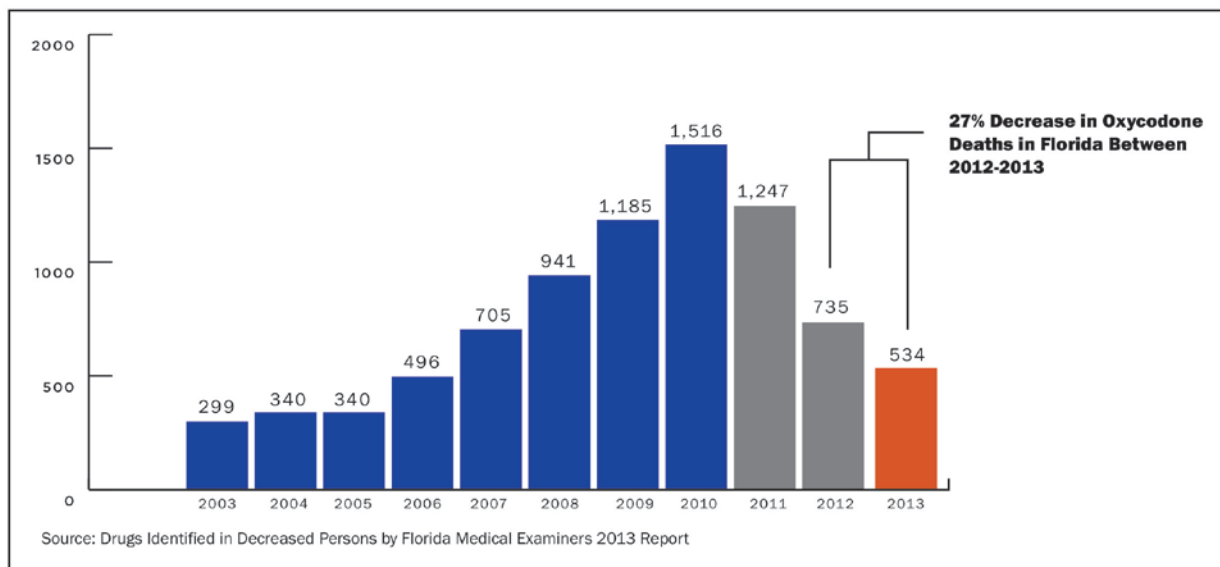
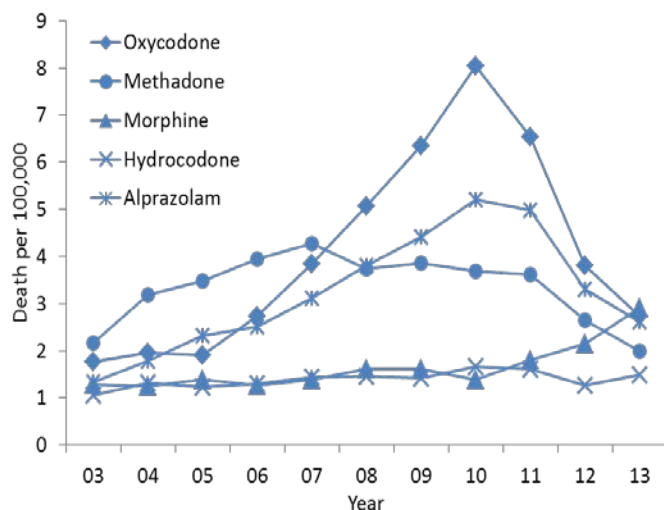


Figure 10. Annual oxycodone mortality, 2003-2013

A similar pattern was observed for the deaths caused by benzodiazepines. The number of deaths caused by alprazolam decreased by 46 percent between 2011-2013. However, the morphine-caused death rate, which had been stable between 2003-2010, has increased from 1.8 to 2.9 per 100,000 from 2011-2013. The number of deaths caused by morphine increased by 37 percent from 2011. The Florida Medical Examiner's Commission notes that since heroin is immediately metabolized to morphine, this may lead to a slight over-reporting of morphine-related deaths. Indeed, deaths caused by heroin increased by 78.7 percent when compared with 2012.²⁰

Figure 11 depicts the mortality rate per 100,000 population for five classes of prescription drugs from 2003 to 2013.



The oxycodone-caused death rate steadily increased since 2005 and peaked in 2010 (8.0 per 100,000). In the subsequent three years, the rate decreased to 2.7 per 100,000 (2013), the lowest since 2006. The mortality rate for methadone and the benzodiazepine, Alprazolam, have also declined since 2010. Deaths from methadone are at their lowest rate (2.0 per 100,000) since 2003. The trend for hydrocodone has been relatively stable over the ten-year period.

Figure 11. Annual mortality rates caused by the major prescription drugs in Florida, 2003-2012

B. PERFORMANCE MEASURE: Number of individuals receiving a specific controlled substance by number of prescriptions, and quantity dispensed, and quantity purchased by pharmacies.

The involvement of stakeholders in achieving improved patient health care, safety, and reduction of prescription drug abuse and prescription drug diversion can be measured in terms of collaboration with another agency to monitor the number of individuals receiving a specific controlled substance by number of prescriptions, quantity dispensed, and quantity purchased by pharmacies.

The PDMP collaborated with the Controlled Substance Registry to improve patient health care safety and reduce prescription drug abuse and diversion by monitoring the distribution and dispensing of Zohydro in Florida. As of September 2014, Florida pharmacies have purchased over 40,000 dosage units of Zohydro ER and there are currently 313 Floridians to whom it has been dispensed.

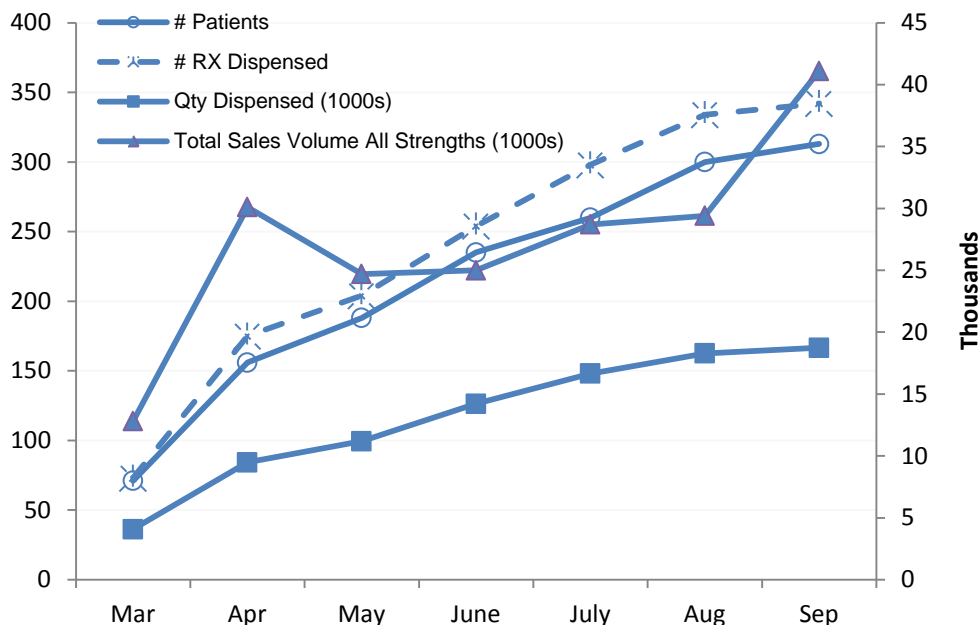


Figure 9. Purchasing and dispensing patterns of Zohydro (extended-release hydrocodone bitartrate) from March to September 2014

The PDMP has also consulted with the DOH's Bureau of Epidemiology to explore the use of Electronic Surveillance System for the Early Notification of Community based Epidemics (ESSENCE) in concert with the PDMP as a surveillance tool.

C. PERFORMANCE MEASURE: Percentage of stakeholder (e.g., state, federal, and local agencies; professional associations, etc.) involvement in the reduction of prescription drug abuse and diversion.

The involvement of stakeholders in achieving improved patient health care, safety, and reduction of prescription drug abuse and prescription drug diversion can be measured in terms of the number of stakeholders who have engaged the PDMP through memorandums of



understanding and attendance at meetings. There has been a 44.27 percent decrease in the number of stakeholders who have engaged the PDMP during the reporting period.

As part of the 2013 Harold Rogers Prescription Drug Monitoring Program Grant awarded to the PDMP, the program will work with UF to establish data-driven multi-disciplinary stakeholder groups to gather existing data resources and evaluate them as surveillance tools to forecast prescription drug abuse issues.

Conclusion

The effectiveness of E-FORCSE as a tool to decrease prescription drug abuse and diversion is demonstrated when comparing the performance measures reported during October 1, 2012 through September 30, 2013 to October 1, 2013 through September 30, 2014.

There have been 35,249,752 prescriptions reported by 6,288 dispensers for 6,594,101 unique patients, indicating each unique patient received an average of 5.4 prescriptions, an increase from 5.3 the previous reporting period.

By the end of February 2014, more than 90 percent of pharmacies required to report data to the PDMP had uploaded information into the system within the seven-day statutory limit. Although its use is not mandatory, physicians and pharmacists have queried E-FORCSE more than 10.6 million times and through educational efforts, E-FORCSE registration increased 16 percent and utilization increased 64 percent. Eighteen percent of the in-state prescribers who issued one or more controlled substance prescriptions were registered to access the database, suggesting it is becoming an integral part of everyday clinical practice. This demonstrates the value of the PDMP as a clinical decision making tool to reduce prescription drug abuse, misuse and diversion.

This increased utilization of the PDMP database resulted in a 20.1 percent reduction in average morphine milligram equivalents (MMEs) per patient since the PDMP became operational.

Of the top twenty-five controlled substances dispensed, hydrocodone with acetaminophen, alprazolam, and oxycodone are ranked the top 3 most commonly dispensed controlled substances, representing 38.4 percent of the total. Drugs with the largest year-to-year increases in dispensing were buprenorphine/naloxone (10.6 percent) and dextroamphetamine/amphetamine (9.1 percent). Drugs with the largest year-to-year decreases in dispensing were eszopiclone (-44.5 percent) and hydrocodone homatopine (-26.8 percent).

Drugs Identified in Deceased Persons by Florida Medical Examiners 2013 Report, shows deaths caused by oxycodone plunged 27.3 percent in 2013, and overall drug deaths fell by 8.3 percent when compared to 2012. In addition, prescriptions for two of the four most harmful prescription drugs, oxycodone and methadone, fell by 24 percent and 8 percent respectively. In the same period, the PDMP documented a 53 percent decrease in the number of individuals receiving prescriptions from five or more prescribers and five or more pharmacies in a 90-day period.

E-FORCSE has proven to be a critical tool in the fight to protect health and safety by reducing doctor shopping and controlled substance related deaths, while supporting sound clinical practice in the prescribing of controlled substances.



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