WEST VIRGINIA BOARD OF PHARMACY

CONTROLLED SUBSTANCES MONITORING PROGRAM

2017 Annual Report

2017 CONTROLLED SUBSTANCE MONITORING PROGRAM HIGHLIGHTS

- **The number of Controlled Substances Monitoring Program (CSMP) users has more than tripled in the last three years, and utilization of the CSMP continues to grow**
- **The total number of controlled substance doses West Virginia patients received this year was 31.28 million less than in 2016, the largest drop in any single year**
- **The powerful opioid hydrocodone has shown the sharpest decline with an almost 50% reduction over the last six years**
- **There has been an 85% reduction in the number of multiple provider episodes (MPE's) over the last 3 years (MPE's are patients obtaining drugs from multiple doctors and multiple pharmacies, all in a short period of time)**
- **The CSMP recently began collecting gabapentin data as a "Drug of Concern", which reveals that approximately 6 million doses are being dispensed monthly**
- **Currently sharing prescription data with the border states OH, VA, MD, KY and PA, in additional to 18 other states and DC**
- **CSMP Advisory and Database Review Committees meet regularly, and continue to monitor and assess PMP data, to proactively address potential drug diversion activities and to find ways to reduce the State's drug overdose problem**
- **2016 West Virginia drug overdose deaths were a record high (884), but hydrocodone, oxycodone and other prescription drug related deaths are down, being replaced by heroin and fentanyl**
- **WV tops many lists related to drug overdose deaths, but we are actually average or relatively low in other categories, like % of patients receiving over 90 MME's (Morphine Milligram Equivalent) daily and patients with overlapping opioid prescriptions**
- **CSMP epidemiologists and data analysts, working with the WV Department of Health and Human Resources, completed the analyses of 2016 drug overdose death data to try and identify opportunities for intervention in the months prior to death**
- **The newest version of the CSMP is under construction and should be completed early next year, which will include new functionality, easier access and enhanced data analysis**

WV CONTROLLED SUBSTANCES MONITORING PROGRAM

2017 ANNUAL REPORT

Introduction

The West Virginia Controlled Substances Monitoring Program (CSMP) is a central repository, maintained by the West Virginia Board of Pharmacy, for collected data related to the prescription and dispensing of all Schedule II, II and IV controlled substances. As required by §60A-9-5, this report is intended to give a brief history of the monitoring program, including the Advisory and the Database Review Committees, highlighting the accomplishments of the CSMP, providing general and statistical information regarding CSMP data and to also recommend legislation to enhance and improve the CSMP and its use.

West Virginia's CSMP Reporting

Each time a controlled substance is dispensed to an individual in West Virginia, it must be reported to the CSMP by the medical services provider as soon as possible, within 24 hours. The dispensing report includes information about the patient, the prescriber who wrote the prescription, the pharmacy that filled the prescription, the product dispensed and the prescription (prescription #, no. doses, refills, form of payment, etc.). The CSMP collects information on approximately five million controlled substance dispensings each year. Beginning in June 2016, the CSMP also began collecting dispensing data for opioid antagonist products, such as Narcan. Gabapentin data is also being collected as a drug of concern. Contracts with Mahantech Corporation are in place to administer the CSMP and to manage the collection of this data, and provide access for authorized users. Board-employed program staff, consisting of an administrator and a clerk, oversees the day-to-day operation of the CSMP, act as liaisons with the software vendor, seek out and maintain grant funding to support the CSMP and provide administrative support to the West Virginia Board of Pharmacy.

The CSMP then offers direct, internet-based, electronic access to this data, primarily for practitioners for purposes of patient treatment. The information in the system is also open to inspection for specific investigations by authorized law enforcement officials, agents of licensing boards of practitioners, agents of the Office of the Chief Medical Examiner (OCME), agents of Bureau of Medical Services, agents of the Office of Health Facility Licensure and Certification, medical school deans, facility chief medical officers and persons with an enforceable court order. The number of users continues to increase (See Figure 1). Utilization by all types of users has also risen tremendously over the last several years (See Figure 2).

CSMP USER TYPE	2014 Active Users	2015 Active Users	2016 Active Users	2017 Active Users
Prescribers	2,537	3,814	6,618	9,100
Dispensers	1,515	2,214	3,359	3,861
Dispensing Prescribers	93	153	253	269
Law Enforcement	43	51	71	101
Other	22	107	52	57
Total	4,210	6,339	10,353	13,388

Figure 1

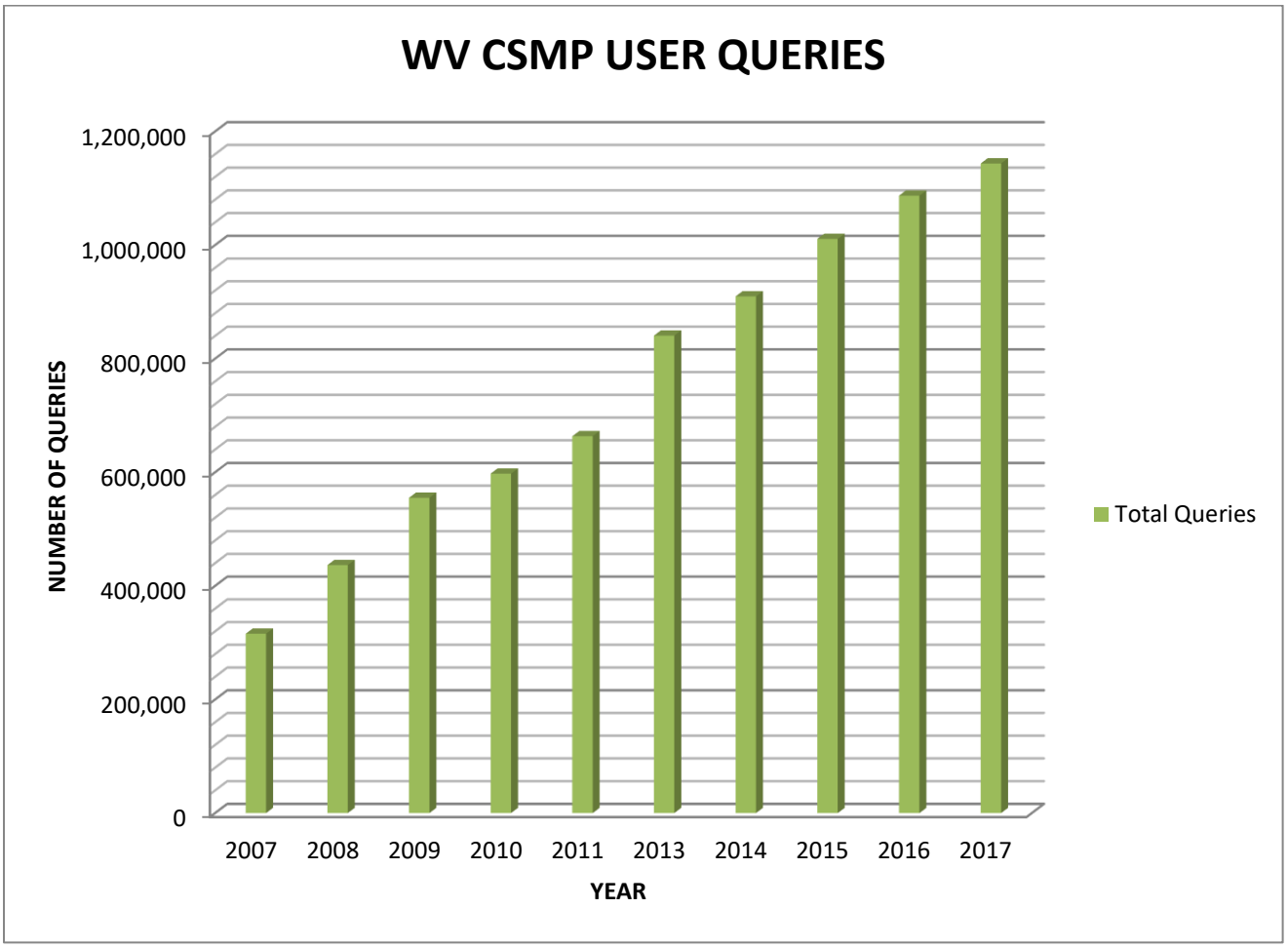


Figure 2

CSMP Dispensing Statistics

Overall dosage unit dispensing numbers have declined over the last several years in West Virginia (See Figure 3). The top 12 products by number of doses dispensed is listed in Figure 4. The Schedule II opioids hydrocodone and oxycodone have seen the most significant drop in numbers, with a combined decrease of over 61 million doses since 2011, and an 18 million dose decrease last year alone (Figure 5). Buprenorphine, a product commonly used to treat opioid addiction, and amphetamines, are the only drug products that are trending upward. Figures 6 & 7 shows data for various drug products. Gabapentin, recently classified as a "Drug of Concern", is now tracked in the CSMP. Initial data shows that approximately 6 million doses are being dispensed monthly, which is roughly equal to hydrocodone and oxycodone combined.

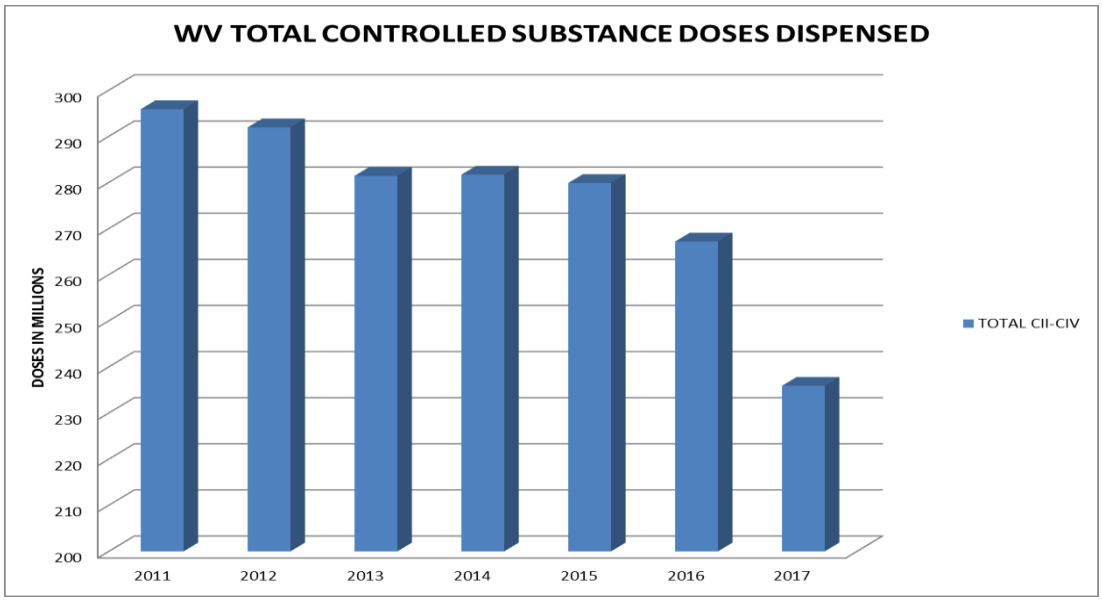


Figure 3

WEST VIRGINIA 2017 CONTROLLED SUBSTANCE DOSES

Rank	Drug Category	Schedule	No. Dispensed
1.	Hydrocodone Products	II	51.75 Million
2.	Tramadol Products	IV	31.86 Million
3.	Alprazolam Products	IV	27.35 Million
4.	Oxycodone Products	II	26.85 Million
5.	Clonazepam Products	IV	15.50 Million
6.	Lorazepam Products	IV	14.43 Million
7.	Buprenorphine Products	III	8.14 Million
8.	Amphetamine Products	II	8.01 Million
9.	Zolpidem Products	IV	7.59 Million
10.	Diazepam Products	IV	7.14 Million
11.	Codeine Products	III	4.32 Million
12.	Methylphenidate Products	II	4.08 Million
	All Other Products	II-IV	28.90 Million
	TOTAL	**II-IV**	**235.92 Million**

Figure 4

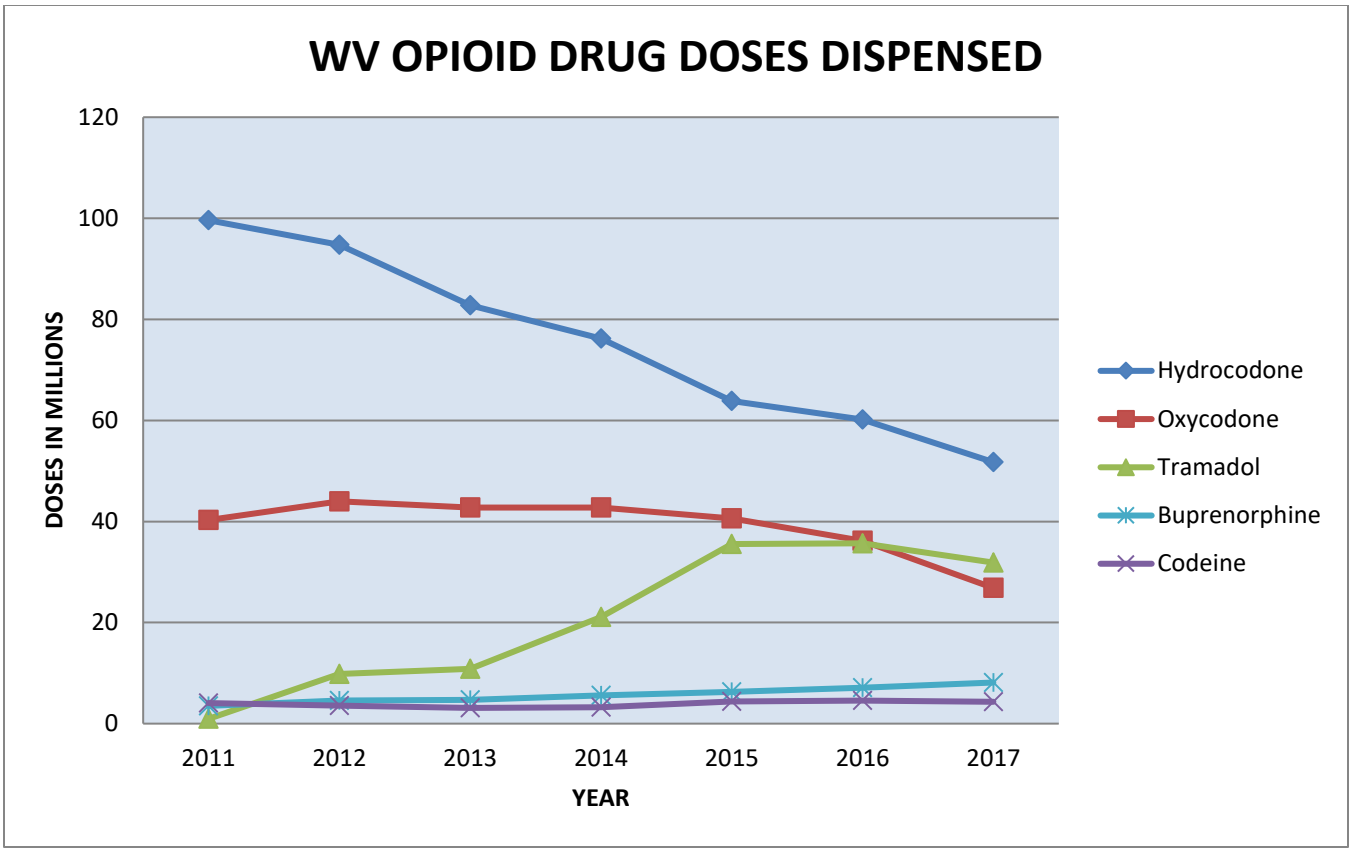


Figure 5

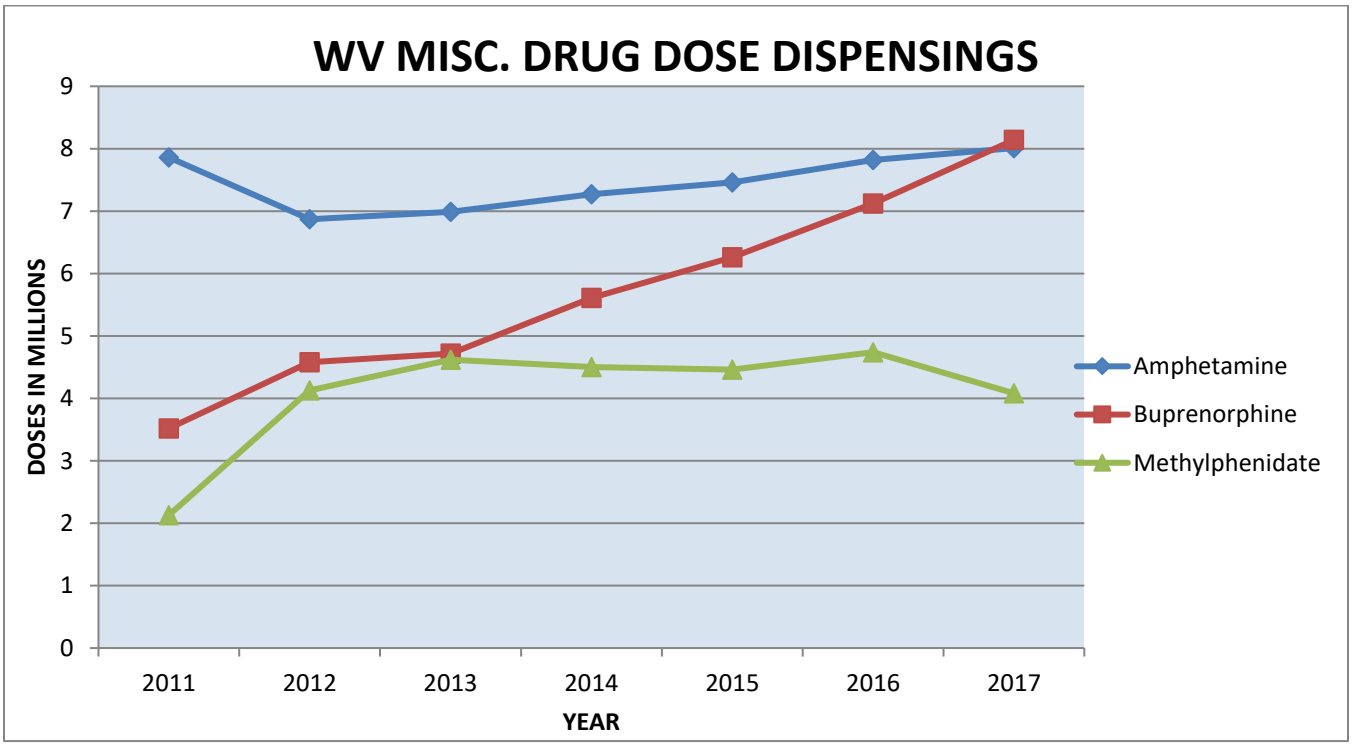


Figure 6

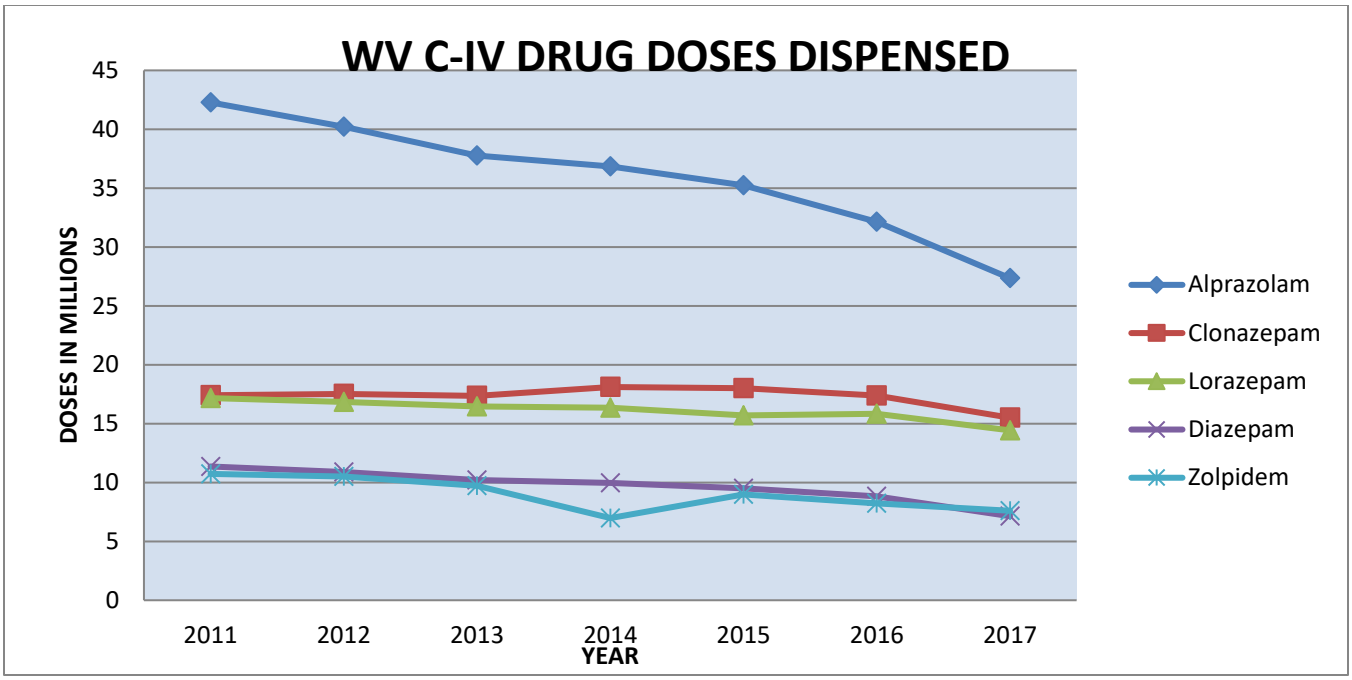


Figure 7

Interstate Data Sharing

In March of 2014, West Virginia successfully deployed its interface with the Prescription Monitoring Program Interconnect (PMPI). PMPI is a data sharing hub, through which authorized users from one state are permitted to obtain patient information from other participating states through their home PMP. West Virginia is currently sharing prescription data with our border states Virginia, Ohio, Kentucky, Maryland and Pennsylvania. We are also sharing data with South Carolina, Connecticut, Indiana, Arkansas, Connecticut, Arizona, Nevada, Kansas, New Mexico, Massachusetts, Michigan, New York, New Jersey, Minnesota, Tennessee, Rhode Island, North Dakota, Colorado and the District of Columbia. We are actively working toward connecting with a number of other states.

Advisory and Database Review Committees

Senate Bill 437 (Regular 2012 Legislative Session) was created to address the prescription drug diversion and substance abuse related problems in West Virginia. Some major components of that bill involve the WV Controlled Substances Monitoring Program (CSMP) and the tracking of prescription drug related activities, including those related to overdose deaths. These key components have been utilized in attempt to reduce prescription drug diversion, inappropriate activities by patients, doctors and pharmacists, and to reduce the number of prescription drug related overdoses. As created by this bill, the Controlled Substances Monitoring Program Advisory Committee and the Controlled Substances Monitoring Program Database Review Committee have been actively trying to address some of these issues in this state through use of the CSMP and the vast amount of useful data it contains.

The CSMP Advisory Committee looks at various patient and practitioner parameters, to determine what data is useful in identifying concerning, dangerous and potentially illegal activity. These parameters are used to detect abnormal or unusual patient patterns, as well as focusing on possible prescribing and dispensing issues with practitioners. A number of CSMP reports have been created to try and isolate concerning activities, such as excessive prescriptions, large percentages of cash transactions, doctor shopping, morphine milligram equivalent doses, etc. This committee has also suggested a number of rules, and have recommended educational and research topics, in order to try and limit the improper use of prescription drugs, to reduce inappropriate prescribing and dispensing of those drugs, and to facilitate the use of the CSMP. Below are some of that Committee's recommendations and the status of each:

1) CSMP to include Morphine Equivalent Dose (MED) capabilities. (Began July 2016)

2) Gabapentin should be changed to a schedule IV drug category, and include the requirement for the prescriber to check the patient CSMP history prior to writing every prescription. (Gabapentin classified a drug of concern and collected in CSMP beginning July 2017)

3) Allowing hospital and medical school administrators to have supervisor capabilities in the CSMP for their prescriber employees. (Began July 2017)

4) Prescribers having the ability to monitor mid-levels they supervise using the CSMP. (To be provided with new CSMP beginning Jan. 2018)

5) CSMP to provide Prescriber Report Cards, to inform practitioners of their prescribing practices and how they compare to their peers. (To be provided with new CSMP beginning Jan. 2018)

6) CSMP reports to include non-fatal overdose information. (To be provided with new CSMP beginning Jan. 2018)

7) The dispensing of all schedule V drugs be included in the CSMP. (No current legislation)

8) Require prescribers to run a CSMP report on each patient prior to prescribing any C-II drugs, any opioids and any benzodiazepines. Exceptions might include cancer patients and terminally ill patients. (No current legislation)

9) Limit duration of opioid prescriptions for acute pain to 7 days or less. (No current legislation)

10) Enhance CSMP Advisory Committee legislation to identify abnormal or unusual prescribing and dispensing patterns and to permit sharing this data with appropriate professional licensing boards and other agencies. (No current legislation)

The Database Review Committee evaluates those who have been identified as outliers to decide appropriate action. Individual patients, prescribers or dispensers that warrant additional scrutiny are being pursued in a number of ways. One activity the committee regularly monitors is Multiple Provider Episodes (MPE's). MPE's are defined as when a patient is obtaining controlled substance prescriptions from multiple physicians, and visiting multiple pharmacies to get them filled, all in a relatively short period of time. Every six months, notifications are sent out to the doctors and pharmacists, regarding their specific patients who are exhibiting this MPE behavior (currently 8 different physicians and 5 different pharmacies in a six month period). As a result, the number of individuals identified has dropped off significantly, and continues to decline (see Figures 8 & 9).

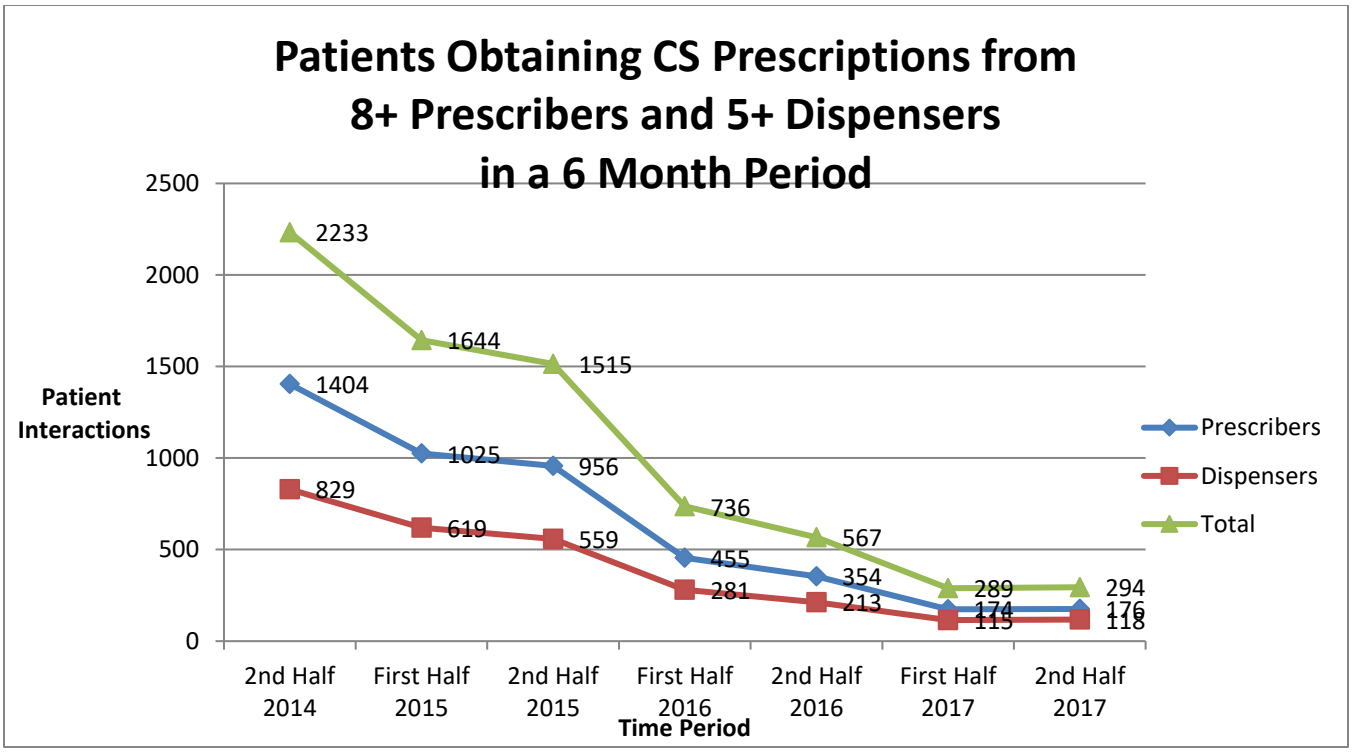


Figure 8

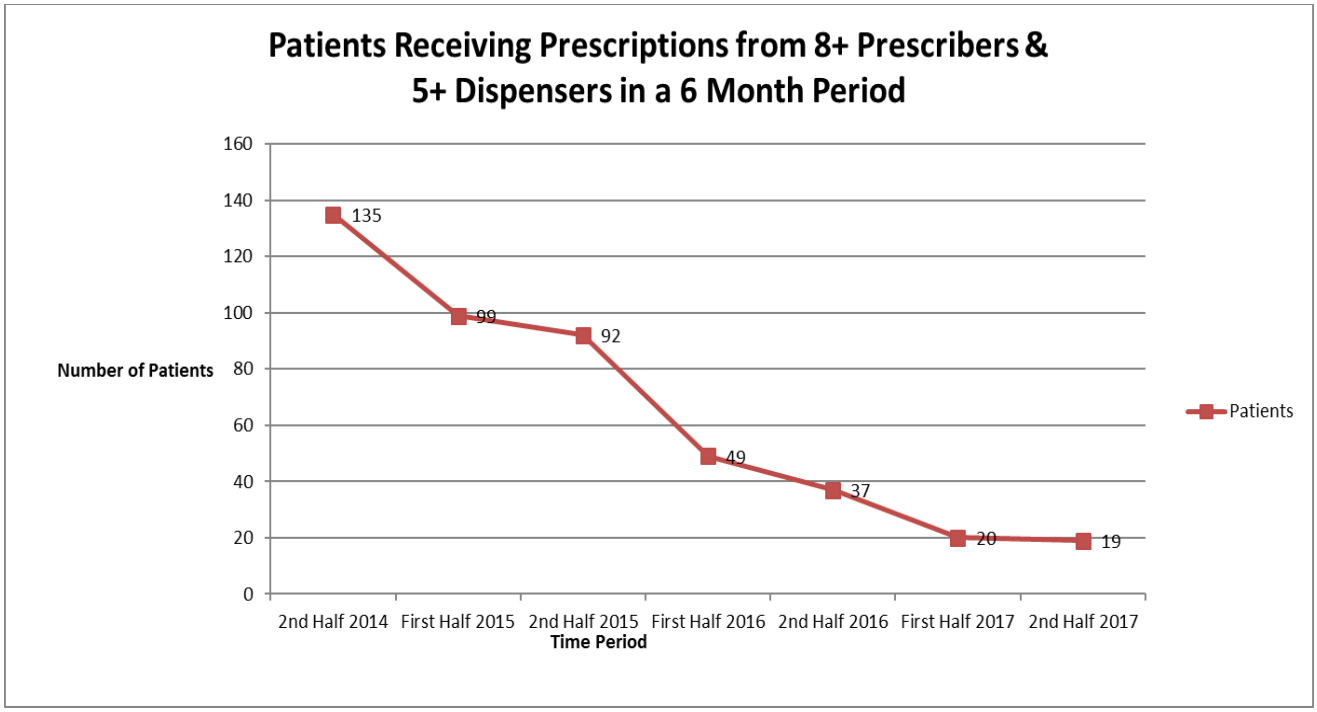


Figure 9

The Database Review Committee also receives and evaluates drug-overdose related death reports from the Office of the Chief Medical Examiner (OCME), and the corresponding CSMP data, relating to hundreds of West Virginia deaths each year. On a case-by-case basis, this committee evaluates this information and must determine if there is a reasonable cause to believe that there has been a breach of professional standard, or a criminal act, involving prescribing and/or dispensing of Schedule II –IV Controlled Substances in these deaths. If so, referrals to licensing boards and law enforcement (including county and federal prosecutors) for further evaluation may be warranted. In every death, where CSMP data indicates a current prescription for any of the drugs listed in the OCME report, a notification is sent to each prescriber who issued that prescription, including the decedent information and the list of drugs involved in the death.

West Virginia Drug Overdoses

West Virginia continues to lead the nation in the number of drug related overdoses per capita. The 884 drug overdose deaths reported in 2016 was a record high for the state, but 2017 numbers are on pace to surpass that total. Deaths involving heroin and fentanyl are largely responsible for the rise over the last couple years, but other illicit drugs like cocaine and methamphetamine are also increasing (See Figure 10). Although the total number of deaths continues to rise, the deaths involving the primary prescription opioids hydrocodone and oxycodone, as well as the benzodiazepines alprazolam and diazepam, are on the decline (See Figure 11).

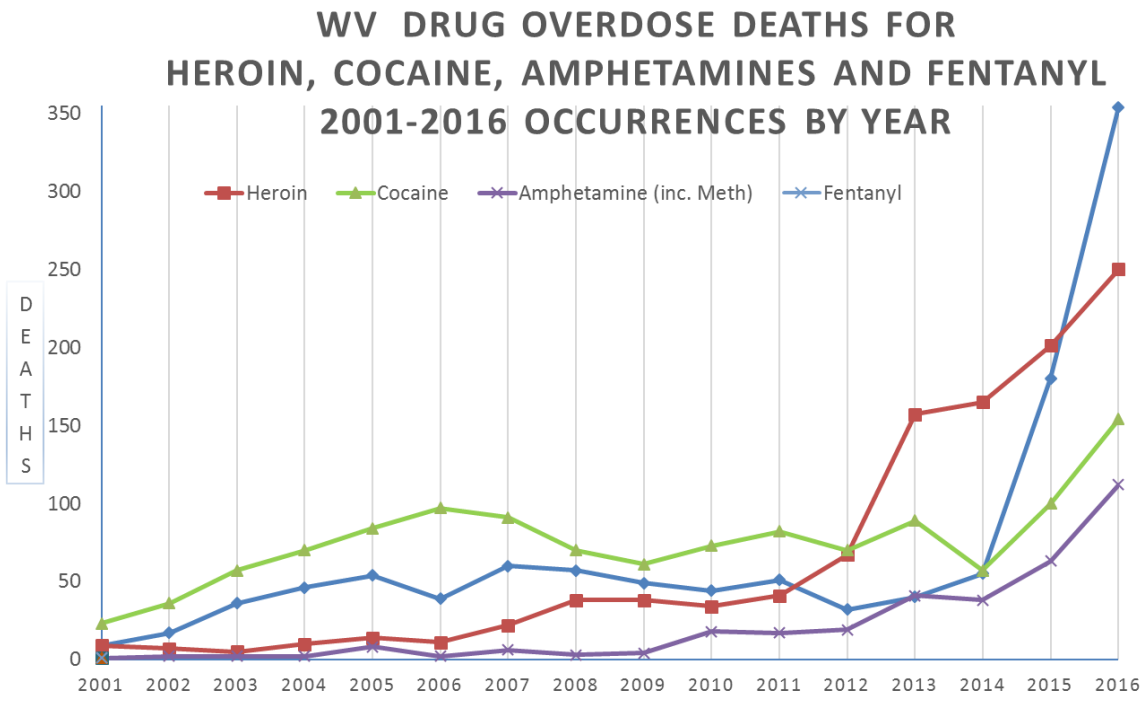


Figure 10

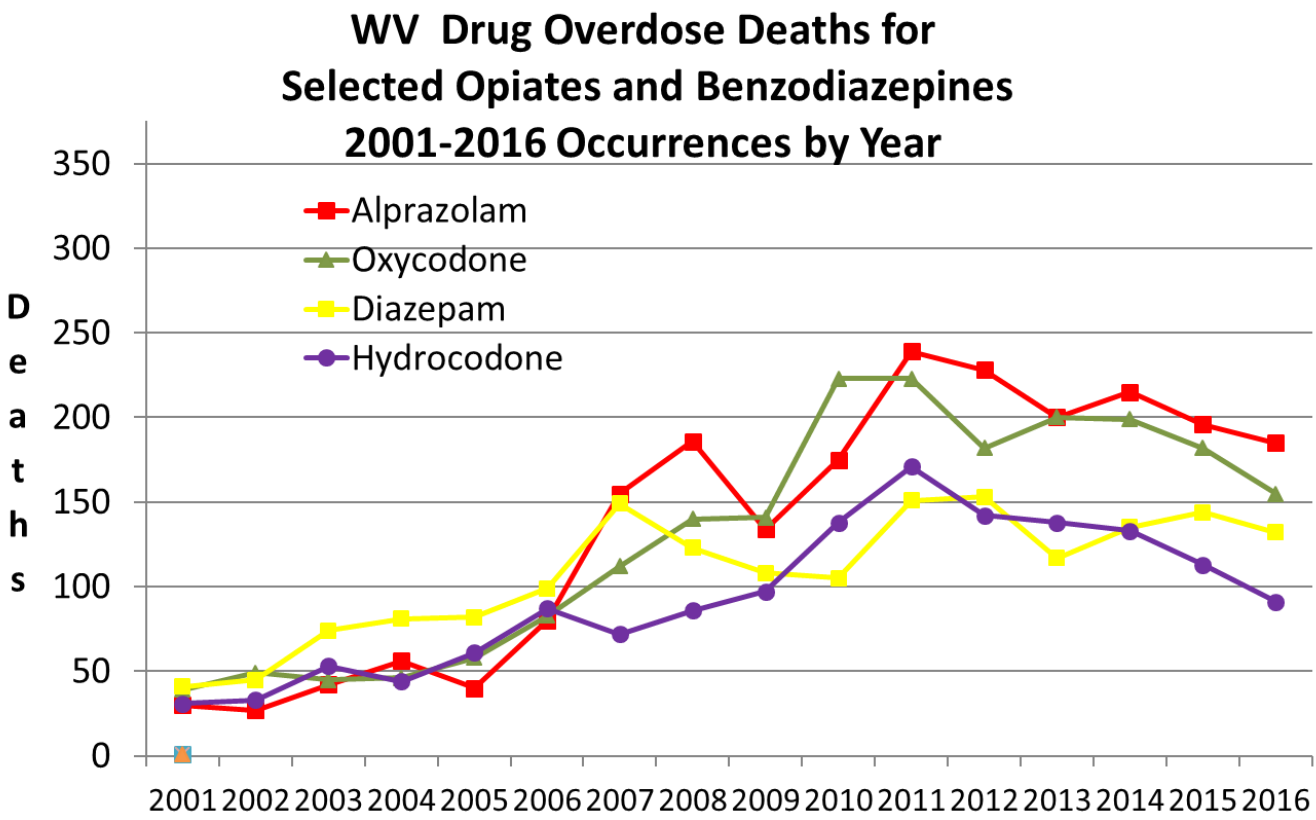


Figure 11

Federal Grant Opportunities

The West Virginia Board of Pharmacy and the CSMP is currently involved with a federal CDC grant, which among other things is intended to facilitate CSMP use, to maximize our system capabilities, to analyze and evaluate existing policies designed to reduce prescription drug overdose morbidity and mortality and produce a plan for addressing these issues, including a comprehensive list of best practices. The CDC grant includes hiring two epidemiologists and a data analyst to assist the Board in the analyses.

One major project with this grant was the analyses of 2016 drug overdose death data to try and identify opportunities for intervention with the victims in the months prior to their death. Death records were matched to available data sources to determine whether the individuals utilized emergency medical services (EMS), behavioral health treatment, were prescribed controlled substances (CSMP data), were incarcerated in state-run facilities and/or were eligible for Medicaid. It was discovered that the majority (81%) of these overdose decedents interacted with at least one of the systems in this report. 91% of all decedents had a documented history within the CSMP.

There were a number of other valuable determinations made. 71% of all decedents utilized emergency medical services within the 12 months prior to their death. Decedents were much more likely to have Medicaid (71%) in the 12 months prior to their death, as compared to West Virginia's adult population ages 19-64 (23%). Over half (56%) of all decedents had been incarcerated at some point. Overall, there were numerous opportunities to interact with overdose decedents. Emergency services appear to have had the most opportunity for intervention, followed by the CSMP and corrections. A more detailed analysis of this study will be forthcoming.

Other Initiatives

The new version of the CSMP is under construction and should be completed early next year. New functionality, easier access and enhanced data analysis will be the most notable improvements. Incorporating non-fatal overdose data into patient reports is one key component required by recently enacted legislation. Doctor Report Cards (tool to inform practitioners about how they compare to their peers), geocoding/mapping capabilities and new trend reports will also be available with the new system.

The Morphine Equivalent Daily Dose (MEDD) component of the West Virginia Controlled Substances Monitoring Program (CSMP), provides practitioners with a useful method for assessing a patient's current level of opioid intake. When a doctor or pharmacist obtains a patient CSMP report, it can now include the at-a-glance MEDD score. This score takes all of the various opioids that a patient is receiving, converts them to a common unit (milligrams of morphine), and calculates the amount that an individual is receiving daily. The WV Controlled Substances Monitoring Program, with the addition of this MEDD score, provides a convenient, state-of-the art tool to help WV practitioners prevent adverse drug-related events such as substance abuse, diversion and overdose.

West Virginia is one of only twelve states that participate in the Prescription Behavior Surveillance System (PBSS) by sending de-identified PDMP data to and receiving reports from the Brandeis PDMP Center of Excellence (COE). The CDC and FDA fund the project through an agreement with the Bureau of Justice Assistance. States participating in PBSS can initiate their own data analysis and share reports with state and community prevention and treatment programs. As stated earlier, WV leads in drug overdose deaths nationally, but we are average to low in other indicators such as average MME's per prescription and patients receiving over 100 MME's daily (See Figures 12 & 13). We have one of the highest levels of co-prescribed opioids and benzodiazepines, which is a significant issue with patient overdoses, but the rate of occurrence is steadily decreasing (See Figure 14).

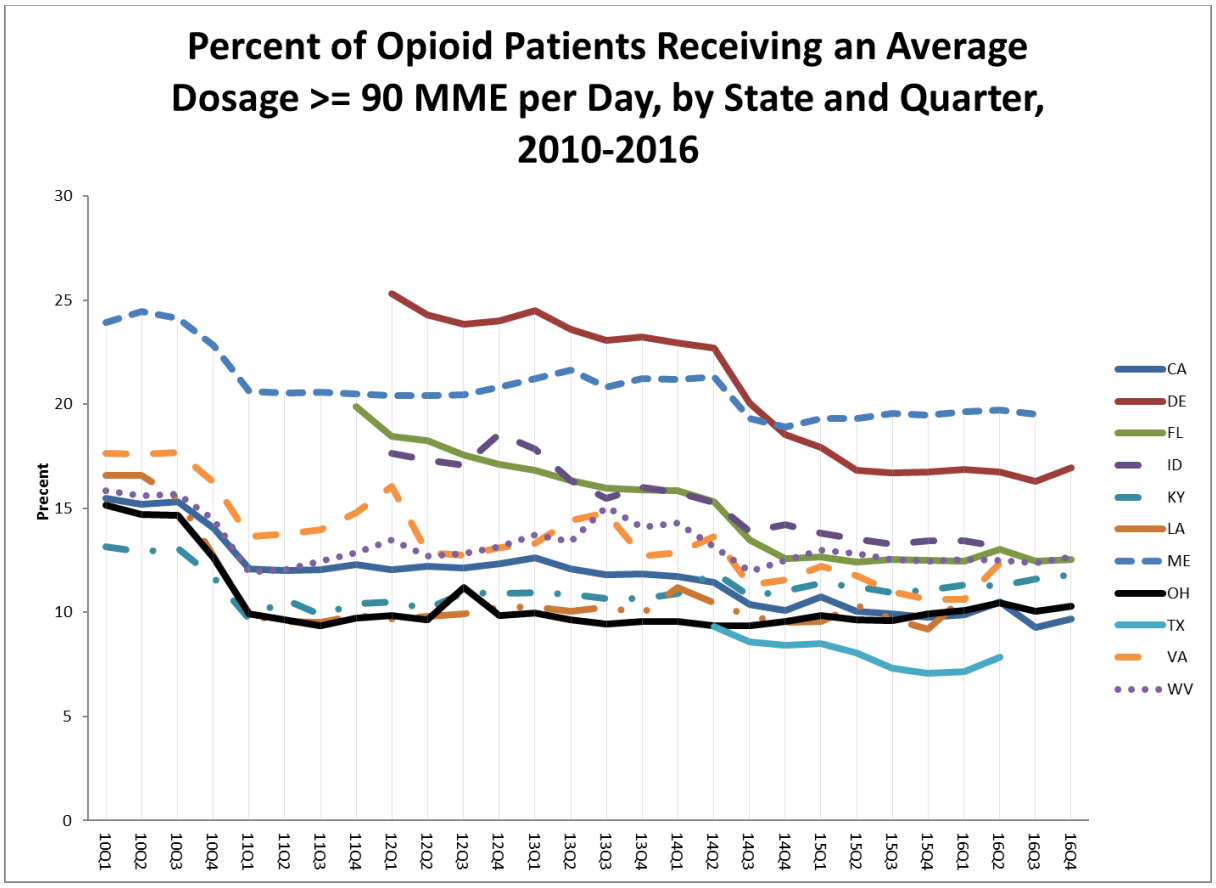


Figure 12

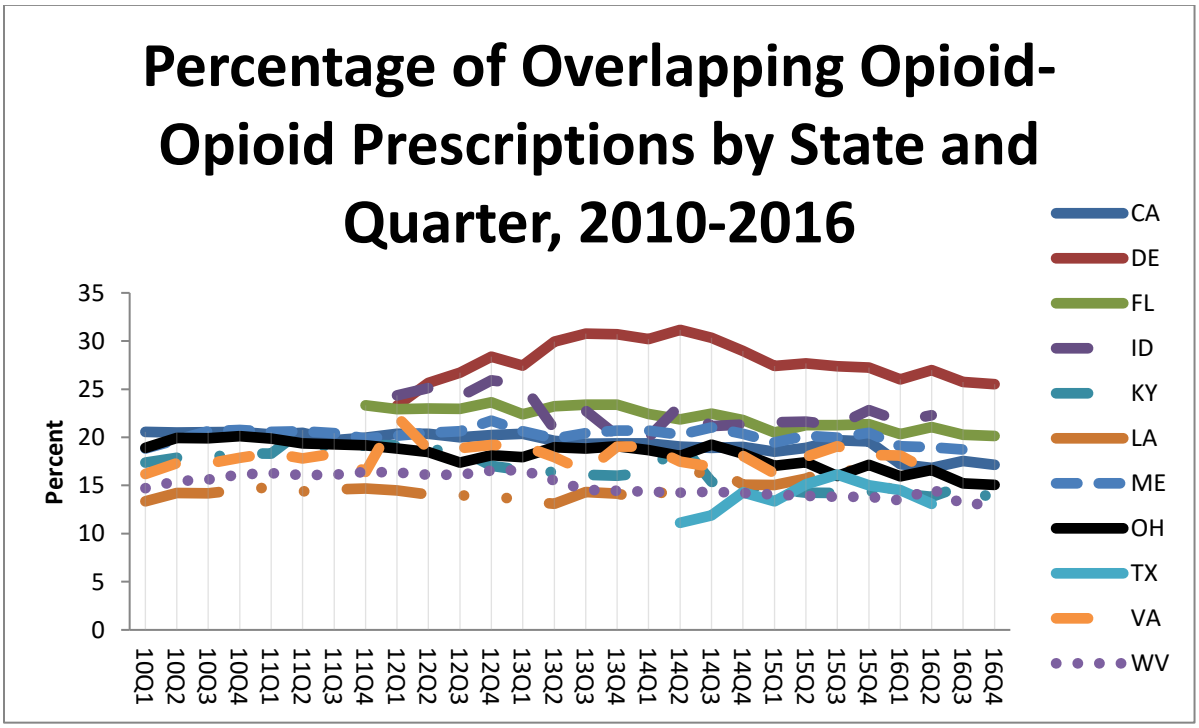
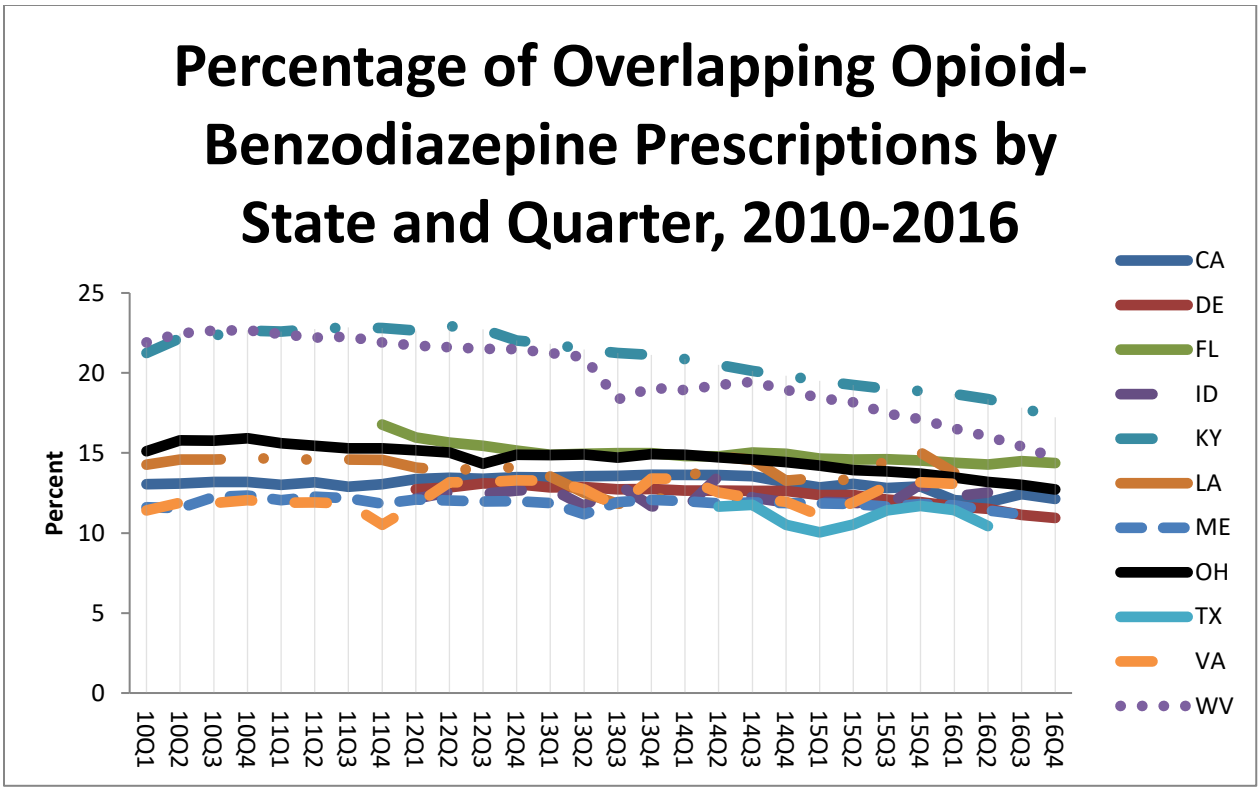


Figure 13


Percentage of Overlapping Opioid-Benzodiazepine Prescriptions by State and Quarter, 2010-2016
Percent
25
20
15
10
5
0
10Q1
10Q2
10Q3
10Q4
11Q1
11Q2
11Q3
11Q4
12Q1
12Q2
12Q3
12Q4
13Q1
13Q2
13Q3
13Q4
14Q1
14Q2
14Q3
14Q4
15Q1
15Q2
15Q3
15Q4
16Q1
16Q2
16Q3
16Q4
CA
DE
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ID
KY
LA
ME
OH
TX
VA
WV

Figure 14