STATE OF CONNECTICUT

PERFORMANCE AUDIT

Connecticut Prescription Monitoring Program

AUDITORS OF PUBLIC ACCOUNTS
JOHN C. GERAGOSIAN ❖ ROBERT J. KANE

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Acronyms & Abbreviations	Definition
APA	Auditors of Public Accounts
CDC	Centers for Disease Control and Prevention
CPMRS	Connecticut Prescription Monitoring and Reporting System
DAS	Department of Administrative Services
DCP	Department Of Consumer Protection
DEA	U.S. Drug Enforcement Administration
DMHAS	Department of Mental Health and Addiction Services
DPH	Department of Public Health
DSS	Department of Social Services
MME	Morphine Milligram Equivalent
MMP	Medical Marijuana Program
PDMP	Prescription Drug Monitoring Program
PMP	Prescription Monitoring Program
UAPA	Uniform Administrative Procedures Act

Performance Audit Highlights

Connecticut Prescription Monitoring Program

Background

The Prescription Monitoring Program (PMP) is within the Department of Consumer Protection (DCP). Pharmacies and other dispensers must provide information, when a controlled substance prescription is dispensed and upload data into a centralized database called the Connecticut Prescription Monitoring and Reporting System (CPMRS).

The information is made available to authorized users to help identify the misuse, abuse, or diversion of controlled substances. Healthcare practitioners who write prescriptions for controlled substances are required to access CPMRS to assist and improve their clinical decision-making.

The purpose for this performance audit was to 1) assess whether sufficient controls are in place to ensure compliance with laws governing the Prescription Monitoring Program, and 2) evaluate how efficient and effective the program is in identifying prescribing and dispensing patterns that indicate potential drug misuse, abuse, or diversion, and determine how that information is used.

Key Findings

1. DCP cannot confirm that all healthcare practitioners are registered with the Connecticut Prescription Monitoring and Reporting System (CPMRS) as required by law.
2. DCP does not enforce and cannot track that healthcare prescribers conducted mandatory lookups in the Connecticut Prescription Monitoring and Reporting System.
3. DCP inadequately monitors dispenser uploading requirements.
4. DCP does not monitor whether dispensers corrected erroneous uploaded prescription data.
5. DCP lacks a formal enforcement strategy and a system to accurately track and report on its drug control enforcement activities. Enforcement is largely driven by complaints.
6. Some of the Department of Consumer Protection's Prescription Monitoring Program management practices are insufficient. We found that program management lacks a strategic plan, performance measures, procedure manuals, and has limited oversight over its database contractor.
7. DCP analysis of Connecticut Prescription Monitoring Reporting System data is limited. Additional scrutiny could better identify patterns of possible misuse of controlled substances.
8. Pharmacists are not required to look up patient prescription history. Even though many pharmacies do this voluntarily, mandating all pharmacies could further reduce drug abuse or diversion.
9. DCP needs to improve the Connecticut Prescription Monitoring and Reporting System. Better training and formal user feedback can improve the system's effectiveness. DCP should include additional prescription data to the system.

Recommendations

We developed 21 specific recommendations to help strengthen DCP's administration of PMP. In addition to strengthening certain management controls, we broadly recommend that DCP should:

- Ensure all practitioners with active licenses issued by the Department of Public Health register with the Connecticut Prescription Monitoring and Reporting System (CPMRS), and conduct patient lookups prior to writing these prescriptions as required by law.
- Ensure all pharmacies and healthcare practitioners that dispense controlled substances are correctly identified, upload required prescription data to CPMRS, and correct any errors that prevent this data from being included in CPMRS.
- Modify its pharmacy inspection process to compare CPMRS data with actual pharmacy prescriptions to confirm that all data has been correctly uploaded into CPMRS. DCP should expand inspections to include healthcare practitioners who directly dispense controlled substances at their practice location.
- Develop an enforcement strategy and accurately report on its drug enforcement activities.
- Develop a strategic plan and performance measures, regularly obtain CPMRS user feedback to improve the system, and increase monitoring of its database provider.
- Assess the benefits of developing data analytics to actively detect questionable prescribing and dispensing activities, which it should refer to the appropriate authorities, if necessary.
- Require pharmacists to query CPMRS when dispensing certain controlled substances and include controlled substances dispensed to nursing home patients in CPMRS.

View the full report, including management's responses, by visiting www.cga.ct.gov/apa
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July 16, 2020

INTRODUCTION
AUDITORS' REPORT

Audit Objectives

In accordance with the provisions of Section 2-90 of the Connecticut General Statutes and Generally Accepted Government Auditing Standards, we have conducted a performance audit of the Prescription Monitoring Program (PMP) within the Department of Consumer Protection (DCP). The scope of the audit included, but was not necessarily limited to January 1, 2019 to December 31, 2019. The objectives for the performance audit include:

1. Assess whether sufficient controls are in place to ensure compliance with program rules and that the program's objectives are being met.

2. Evaluate how efficient and effective the Prescription Monitoring Program is in identifying prescribing and dispensing patterns that indicate potential drug misuse, abuse, or diversion, and determine how that information is used.

Methodology

This audit depended on a variety of sources and methods to assess the Prescription Monitoring Program. As such, we:

A. Reviewed relevant literature regarding prescription monitoring programs, including information from state and federal sources;

B. Examined applicable Connecticut and federal statutes and regulations to learn about the legal requirements and policies pertaining to prescription monitoring programs and controlled substances;

C. Researched national and state trends in drug use, abuse, and overdose statistics;

D. Interviewed staff and managers from the Department of Consumer Protection to obtain program data and learn about the regulation of controlled substances, how DCP conducts drug control investigations, and how DCP implements the Prescription Monitoring Program;

E. Interviewed staff and managers from the Departments of Social Services and Public Health who access the Prescription Monitoring Program data;

F. Interviewed various members of the 6 medical boards who oversee practitioners holding a controlled substance registration and members of the Commission on Pharmacy;

G. Interviewed various stakeholder organizations that have an interest in the operation of the Prescription Monitoring Program, including the Connecticut State Medical Society and Connecticut Police Chiefs Association;

H. Surveyed over 26,000 healthcare practitioners with controlled substance registrations to learn about their experience with the Prescription Monitoring Program and received 5,900 valid responses (for a 22% response rate);

I. Examined various program activity and outcome measures for the Prescription Monitoring Program;

J. Researched best practices for the operation of prescription monitoring programs and compared them to current DCP practices; and

K. Obtained various operational documents, interviewed personnel with, and acquired data from DCP's private database services contractor that hosts Prescription Monitoring Program data.

We also obtained an understanding of internal controls that we deemed significant within the context of the audit objectives and assessed whether such controls have been properly designed and implemented. We tested certain of those controls to obtain evidence regarding the effectiveness of their design and operation. We conducted our audit in accordance with the standards applicable to performance audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. These standards require that we plan and perform our audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides such a basis.

Executive Summary of Findings

The Prescription Monitoring Program collects patient-specific controlled substance prescription data from pharmacies and other dispensers in a centralized database called the Connecticut Prescription Monitoring and Reporting System (CPMRS). This information is available to authorized users to help identify the misuse, abuse, and diversion of controlled substances. Healthcare practitioners who write prescriptions for controlled substances are required to access CPMRS to improve clinical decision-making.

Sufficiency of controls. We found that the Department of Consumer Protection's controls over the Prescription Monitoring Program are not sufficient to ensure compliance with state laws. The lack of controls may be distorting the accuracy of prescription and enforcement data. Although the number of required PMP registrations have recently increased, the department has not been able to ensure that all prescribers properly registered with the Connecticut Prescription Monitoring and Reporting System or that they (or their delegates) look up their patients' controlled substance prescription history as required by law. Unregistered healthcare practitioners are not in compliance with the law. Registered prescribers who fail to perform mandatory patient lookups may not be fully aware of patients who could be at high risk for drug misuse, abuse, and addiction.

In addition, we found that the Department of Consumer Protection does not:

1) Accurately identify all practitioners who dispense controlled substances in the state.

2) Adequately monitor registered drug dispensers to ensure they upload all of their controlled substance information into the Connecticut Prescription Monitoring and Reporting System.

3) Effectively track whether uploaded prescription data with errors are corrected. Although there is a small percentage of uncorrected errors, incomplete and uncorrected data raises concerns about CPMRS data quality on individual patient case histories, and reduces the system's utility to the healthcare community.

Aside from the impact on CPMRS data quality, practitioners unknown to DCP who dispense drugs may pose a threat to patient safety. Furthermore, we found that while DCP performs regular pharmacy inspections, it does not compare Connecticut Prescription Monitoring and Reporting System data with actual pharmacy prescriptions to confirm CPMRS accuracy. In addition, DCP lacks a systematic plan to inspect non-pharmacy dispensers, such as doctors who dispense controlled substances from their office. It is thereby missing an opportunity to ensure greater compliance by this segment of the regulated community.

We also found various management deficiencies that can contribute to a breakdown in controls, including the inability to accurately track and report on drug control enforcement activities, the lack of a formal strategic plan with performance and outcome measures, inadequate procedures manuals, and limited contract management monitoring of the department's database vendor.

Efficiency and effectiveness. We reviewed the Prescription Monitoring Program's efficiency and effectiveness in identifying prescribing and dispensing patterns that indicate a potential for drug misuse, abuse, and diversion. We found that PMP works fairly well in providing individual patient history of controlled substance prescribing use. However, the Connecticut Prescription Monitoring and Reporting System appears to be missing prescription information that could provide a more accurate picture.

Over the last several years, the state has enacted a number of reforms to address the growing number of drug overdoses and deaths involving non-medical prescription drug use, including several changes intended to strengthen the Prescription Monitoring Program. While it is difficult to measure the effect of a single change developed to address this problem, Prescription Monitoring Program data shows that, even with an increase in controlled substance prescriptions

overall, there has been a reduction in opioids dispensed over the last several years. However, the number of opioid-related drug overdoses has increased.

We found that information in the Connecticut Prescription Monitoring and Reporting System could be utilized to more effectively identify aberrant or concerning prescribing and dispensing patterns that could result in controlled substance misuse, diversion, and abuse. We also noted a few areas in the Prescription Monitoring Program that could be strengthened by requiring pharmacists to look up their patient's prescription history for the most addictive legal controlled substances and including prescription history data from nursing homes in CPMRS.

We surveyed over 26,000 prescribers and conducted in-person interviews with all of the boards that regulate practitioners who prescribe controlled substances. The results suggest that most practitioners find the Prescription Monitoring Program useful, especially when they prescribe a new controlled substance or if they suspect misuse. We are concerned that nearly 25% of respondents never consulted the Connecticut Prescription Monitoring and Reporting System, even though they prescribed a controlled substance within the previous month.

On the other hand, certain CMPRS features, like automatic alerts about a patient's potential dangerous drug patterns and prescriber report cards, have helped practitioners change their prescribing decisions. Similarly, pharmacists appear to find Prescription Monitoring Program data helpful when trying to determine whether a patient is misusing an opioid and when they need to refuse to dispense a patient's medication. The results of the prescriber survey also indicated that the Department of Consumer Protection could do more to make the system more user friendly and better integrated with existing electronic health systems.

The accompanying background is presented for informational purposes. This information was obtained from interviews, observations, and data provided by key stakeholders and was not subject to the procedures applied in our audit of the program and department. The State Auditors' Findings and Recommendations in the accompanying report presents any findings arising from our audit of the Prescription Monitoring Program.

PROGRAM BACKGROUND

As part of the response to address the growing problem of opioid and other addictive drug misuse, abuse, and diversion, 49 states, including Connecticut, implemented fully electronic prescription drug monitoring programs (PMPs).[1] These programs track controlled substances dispensed to each patient from community pharmacies and certain healthcare practitioners.

Controlled substances are addictive drugs. Controlled substances include pain relievers (such as opioids), stimulants, depressants, hallucinogens, and anabolic steroids.[2] These drugs are classified into 5 schedules relative to their abuse potential, as shown in **Exhibit 1**. A drug's classification is determined by the U.S. Drug Enforcement Administration (DEA) and state regulation. Schedule I shows illegal drugs that have no accepted medical use, are highly addictive, and include heroin and LSD. Schedule V shows drugs with the lowest potential for abuse and includes Robitussin AC cough medicine, which contains codeine. Schedule I drugs are not included in the CPMRS because they have no accepted medical use and are illegal.

Exhibit 1. Controlled Substance Drug Schedules

Schedule	Definition	Examples
I	Illegal Drugs	Heroin, LSD, peyote
II	High potential for abuse, which may lead to severe psychological or physical dependence	Hydromorphone, oxycodone, fentanyl, amphetamines
III	Potential for abuse that may lead to moderate or low physical dependence or high psychological dependence	Tylenol with Codeine, ketamine, anabolic steroids
IV	Low potential for abuse and low risk of dependence	Xanax, Klonopin, Valium
V	Lower potential for abuse than Schedule IV and consist primarily of preparations containing limited quantities of certain narcotics	Cough preparations like Robitussin AC, Lyrica

Source: Federal Drug Enforcement Administration

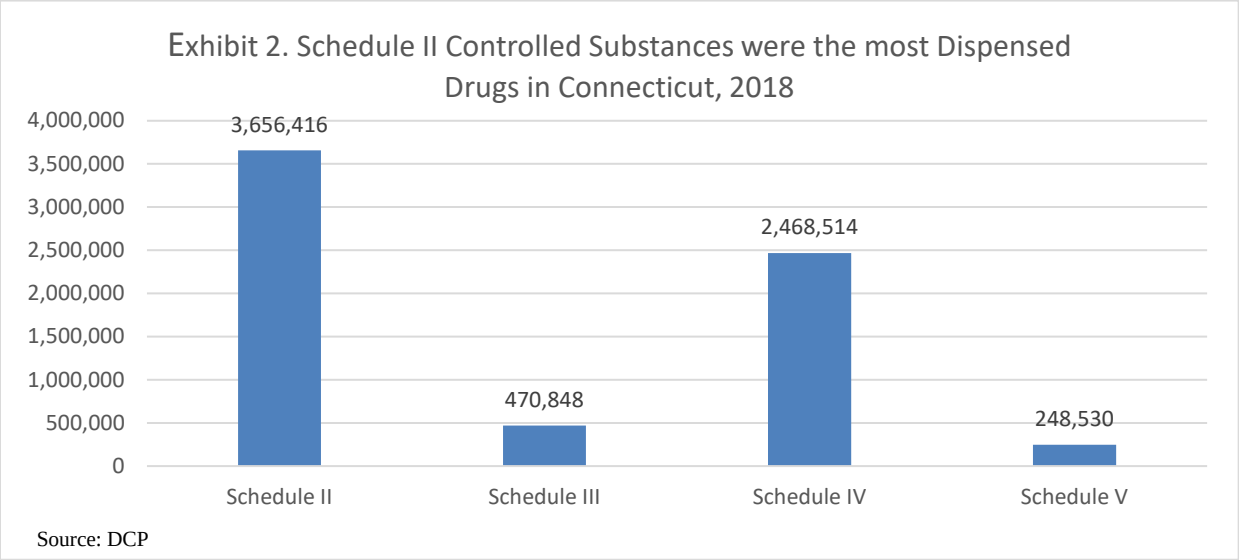
Although all prescription monitoring programs require pharmacies and other dispensers to report patient-specific prescription-related data, each state implemented its program at different times, resulting in considerable variation in state policies. This includes whether a prescriber or dispenser is mandated to look up a patient's controlled substance history, how dispensers report data, the types of reports generated, and what entities access the data. In addition, different rules apply to law enforcement use of the system. This ranges from requiring law enforcement to obtain a warrant to access PMP regarding a specific individual, to states that proactively inform law enforcement of suspicious activity by healthcare practitioners, pharmacists, and private individuals.

[1] Missouri is the only state that does not have a full statewide monitoring program, although there are coordinated programs that operate among certain cities and counties in the state.

[2] Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin), hydrocodone (Vicodin), codeine, morphine, and many others.

Connecticut's Prescription Monitoring Program. The Connecticut General Assembly established the Connecticut Prescription Monitoring Program in 2006 through Public Act 06-155 (codified in Section 21a-254(j) of the General Statutes), to be administered by and located within the Department of Consumer Protection and it became fully operational on July 1, 2008. DCP issues controlled substance registrations to the Department of Public Health's licensed healthcare practitioners, granting them the ability to write controlled substance prescriptions. Only certain practitioners can apply for this registration.[3] The program collects prescription information on controlled substances into a centralized database called the Connecticut Prescription Monitoring and Reporting System (CPMRS) to prevent improper or illegal drug use and help identify improper prescribing patterns. Healthcare practitioners can use the system to obtain a comprehensive picture of their patients' controlled substance use aimed at improving the quality of patient care. Patients prescribed these drugs are considered to be at a higher risk of abuse and addiction.

Exhibit 2 shows the number of prescriptions dispensed by drug schedule in Connecticut. Schedule II drugs, which includes Oxycodone, Amphetamine Salts, and medical marijuana, are dispensed the most and are among the most highly abused and addictive drugs.[4]



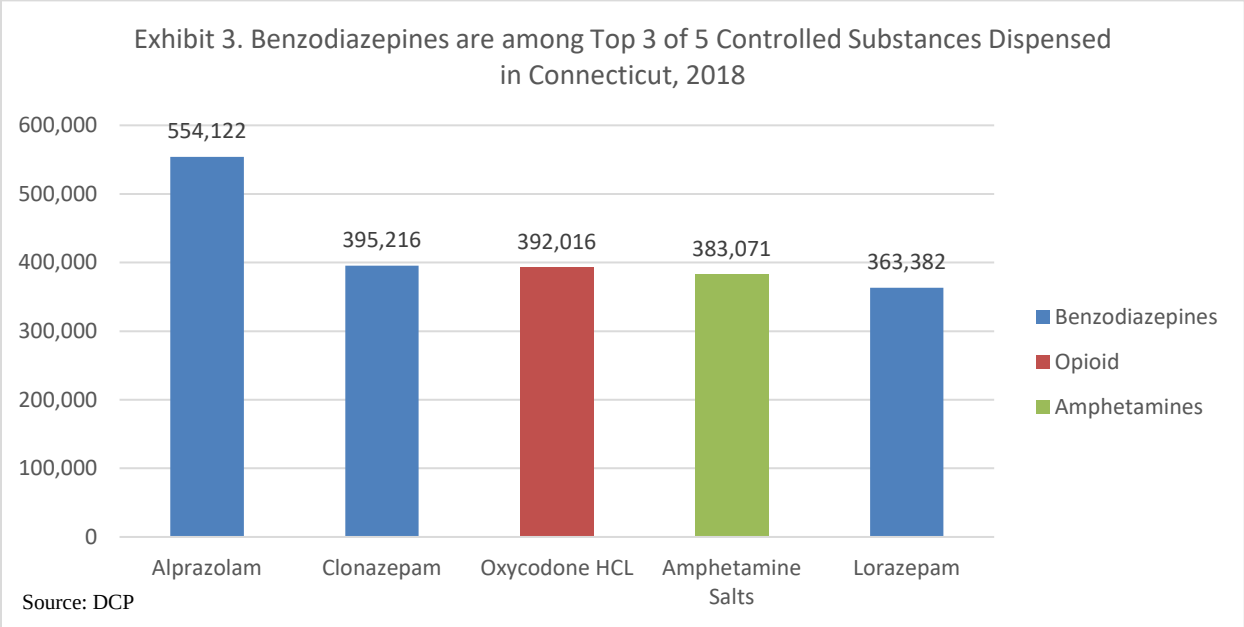
Source: DCP

Benzodiazepines, designated as Schedule IV drugs, are also among the most prescribed controlled substances. They are a class of drugs that work by triggering a tranquillizing chemical in the brain and are used for a range of health issues, including anxiety, sleep disorders, and alcohol withdrawal. **Exhibit 3** shows the top five types of controlled substance prescriptions written and dispensed in Connecticut. It should be noted, the high number of Schedule II drugs dispensed are

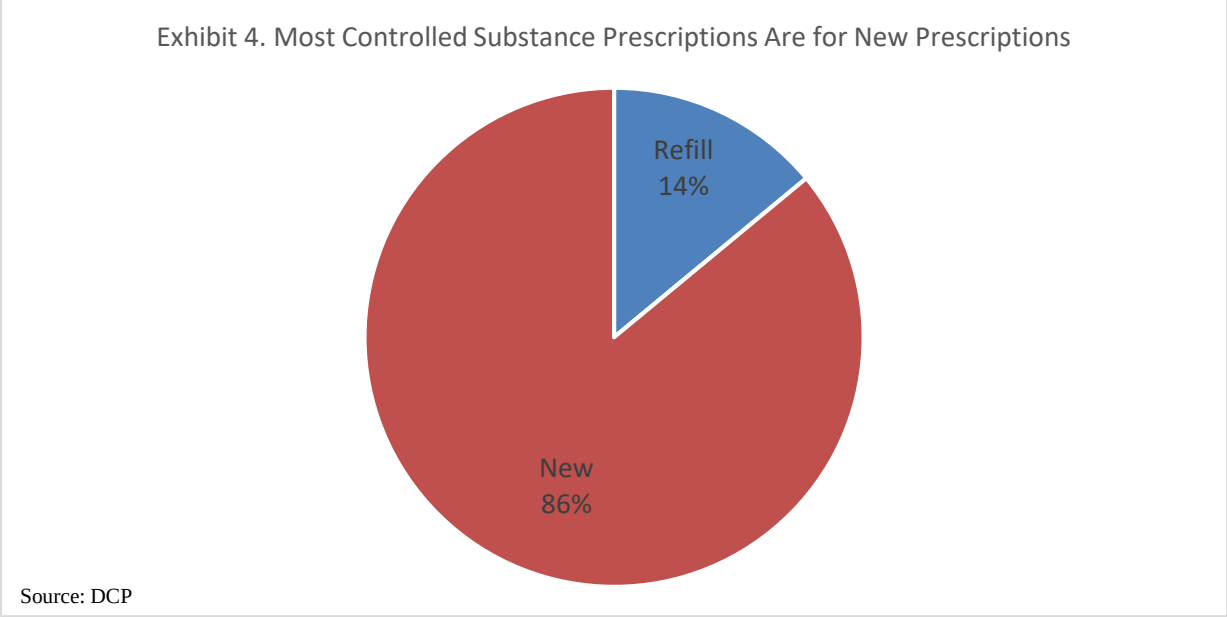
[3] Licensed healthcare professionals allowed to apply for a controlled substance registration and register with PMP if they hold a controlled substance registration include: physicians; dentists; veterinarians; podiatrists; osteopaths; optometrists; physician assistants; advanced practice registered nurses; nurse mid-wives; and certain individuals conducting scientific research.

[4] The total controlled substances dispensed in Exhibit 2 is slightly less than the total controlled substances dispensed in Exhibit 5 because some uploaders have been uploading data about certain drugs that may lead to abuse, like gabapentin, that are not scheduled drugs.

for persons with acute or chronic pain. Many individuals are prescribed these drugs on a short-term basis as they recover from surgical procedures.



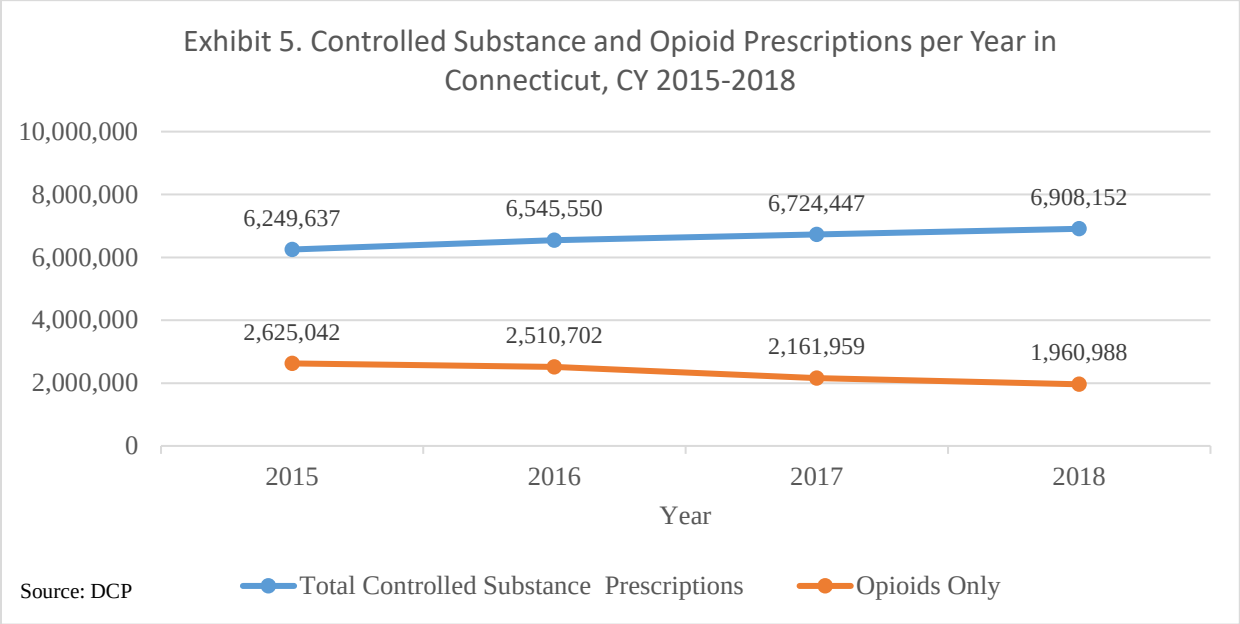
Only a relatively small percent of controlled substances are refills. Most dispensed controlled substances are for new prescriptions, as shown in **Exhibit 4**.



Prescription trends: Decline in opioid dispensing. The contribution of controlled substances to rates of misuse, abuse, and overdose deaths have been of increasing concern in Connecticut and the United States. According to the Kaiser Family Foundation, 43.6 million prescriptions were

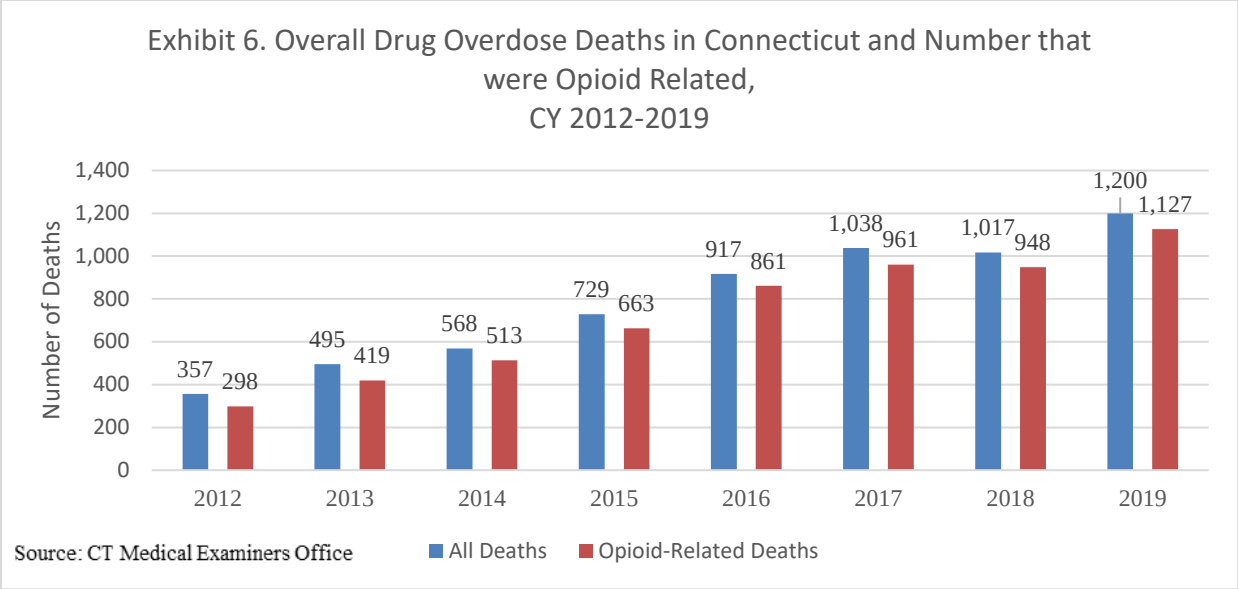
dispensed in Connecticut in 2018. Nearly 7 million (16%) of those prescriptions were for controlled substances. Of those, almost 2 million (29%) were for opioids.

While the overall number of controlled substance prescriptions in Connecticut rose over the last several years, the number of opioid prescriptions fell. (Controlled substances also include medical marijuana, which became available to qualified Connecticut patients in 2014). Controlled substance prescriptions went up by about 11% between 2015 and 2018. At the same time, the number of opioid prescriptions declined by about 25%, as illustrated in **Exhibit 5**. Still, according to the National Survey on Drug Use and Health, during 2015–2017, Connecticut residents aged 12 or older misused 151,000 (4.9%) prescription pain relievers in the past year. That is slightly higher than the average in other New England states (4.0%) and the nation (4.3%). Misuse includes individuals taking prescription analgesics not prescribed to them or used for the feeling they caused (i.e. high or euphoria).



Overdose trends: Increase in overdose deaths. In 2019, Connecticut's accidental overdoses (involving any controlled substance) increased 18%, after a small decline in 2018. However, accidental overdoses have gone up 236% since 2012, as illustrated in **Exhibit 6**. The 1,200 overdose deaths in 2019 were the most recorded since the state started tracking such data. The Centers for Disease Control and Prevention (CDC) reported that, compared to the nation, Connecticut's rate of overdose deaths:

- Was higher than the national rate (30.9 vs. 21.7 per 100,000) in 2017; and
- Increased faster than the national average between 2016 and 2017 (12.8% for Connecticut versus 9.6% for the U.S.).



Even with a drop in the number of dispensed opioid prescriptions, Connecticut has not been immune to the nationwide opioid epidemic. Both prescription and non-prescription (illegal) opioids are considered the main driver of overdose deaths. Ninety-four percent of overdoses in Connecticut in 2019 involved an opioid. The exhibit illustrates a 278% increase in opioid-related deaths between 2012 and 2019.

According to the National Institute on Drug Abuse, since the late 1990s, the greater availability of prescription opioids is related to the increase in overdoses. In addition, about 21 to 29%of patients prescribed opioids for chronic pain misuse them. Furthermore, about 4 to 6% of individuals who misuse prescription opioids transition to heroin.

Data from the Connecticut Office of the Chief Medical Examiner also indicate that deaths from the use of fentanyl has become more prevalent. Fentanyl is a synthetic (manufactured) opioid 50 times more potent than heroin and 100 times more potent than morphine. Fentanyl was involved in 979 of the 1,127 (87%) opioid-related deaths in 2019, compared to 14 of the 298 (5%) in 2012. The data also show that new drug issues emerge over time. For example, the medical examiner reports that, beginning in 2019, a new drug called Xylazine (a veterinary tranquilizer) was involved in 71 fentanyl-related deaths.

Prescription Monitoring Program operations. The Prescription Monitoring Program was originally established to maintain a data repository on prescribed and dispensed controlled substances accessible to healthcare practitioners and dispensers to prevent the misuse, abuse, or illegal use of these types of prescription drugs. Initially, the law only required Connecticut pharmacies to upload (to the Connecticut Prescription Monitoring and Reporting System), on a bi-weekly basis, specific-patient level prescription information for all prescribed and dispensed controlled substances for outpatient use. This information was available from the Department of Consumer Protection to prescribers involved in treating patients and dispensers managing drug therapy. The program did not mandate prescribers to check CPMRS at that time. Subsequent legislation expanded program mandates by requiring out-of-state pharmacies, outpatient

pharmacies in hospitals and institutions, and practitioners who dispense (also known as non-pharmacy dispensers) to upload dispensed controlled substance data to PMP. Non-veterinarian dispensers also are required to upload more frequently. The legislature also has imposed stricter requirements for prescribers of controlled substances, requiring them to access CPMRS prior to writing a controlled substance prescription. (See **Appendix A** for PMP legislative history.)

All prescribers are required to register with PMP. DPH-licensed health professionals issued a DCP-controlled substance registration must register with the Connecticut Prescription Monitoring and Reporting System. If health professionals intend to designate the use of the system to a staff member, they also must register the delegate. The controlled substance registration gives the prescriber authority to issue a controlled substance. Prior to prescribing a controlled substance, the law mandates that prescribers or their delegates look up their patients' controlled substance prescription history in CPMRS for drug history information in the course of treatment. Depending on whether the prescription is for a new drug or a refill, the prescriber must follow different CPMRS lookup requirements (shown in **Exhibit 7**).

Exhibit 7. PMP Lookup Requirements for Prescribers per Connecticut Law

	Controlled Substance Schedule	New Prescription	Refill Prescription
Patient	Schedule II – V except for below	> than a 72-hour supply[1]	Every 90 days
	Schedule V Nonnarcotic	> than a 72-hour supply[1]	Annually

[1] A separate section of the Connecticut General Statutes limits supplies of controlled substances to a specified number of days: For new prescriptions, limited to a 7-day supply for adults; 5-day supply for minors under 18 years old, unless the professional medical judgment of a prescribing practitioner deems it necessary and documents it in the patient's medical record.

If a patient has never received a controlled substance prescription, a prescriber would not find the patient history in the Connecticut Prescription Monitoring and Reporting System. CPMRS only captures a patient's past controlled substance prescription history if the dispenser properly uploaded it in CPMRS.

The number of registered CPMRS healthcare professional users increased between calendar years 2017 and 2018, as illustrated in **Exhibit 8**.[5] By the end of 2018, there were nearly 30,000 prescribers and their delegates registered along with over 2,700 pharmacists. The findings and recommendations section of this report notes that DCP cannot determine whether all prescribers are in fact, registered with the program.

[5] 2016 data is not shown because the data were incomplete. In June 2016, DCP's incumbent database vendor was purchased by a new company, which subsequently switched the data to a new system resulting in some data loss.

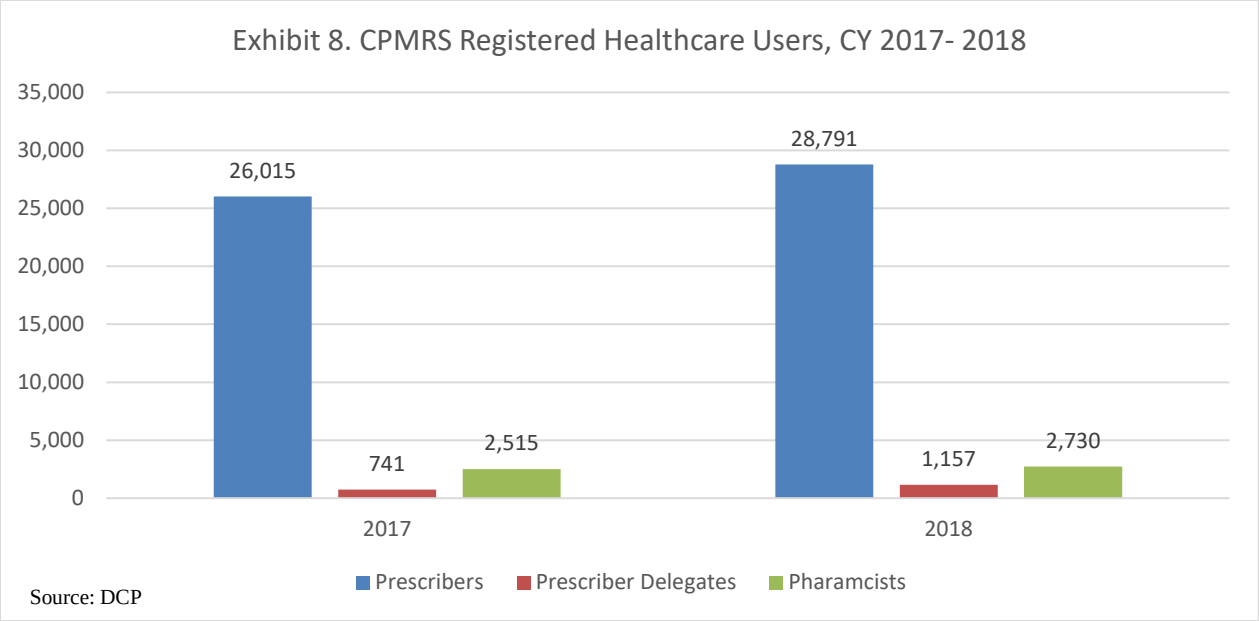
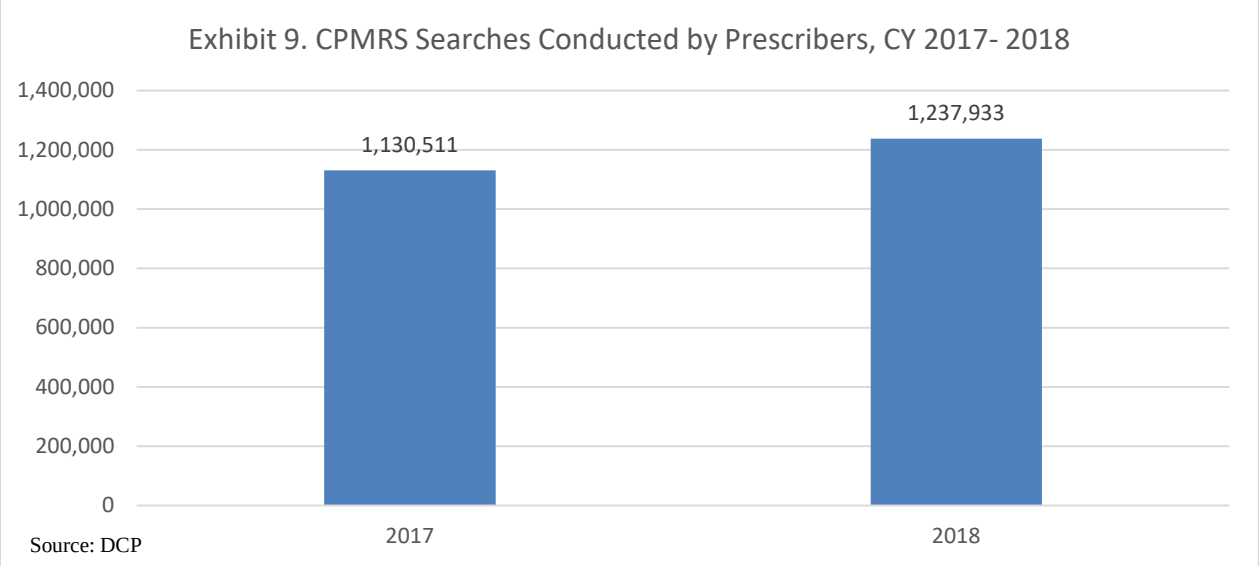


Exhibit 9 illustrates the number of prescriber searches. The exhibit shows there was a 9% increase in patient lookups from 2017 to 2018.



Connecticut Prescription Monitoring and Reporting System patient features. In addition to giving prescribers access to a comprehensive window into an individual's controlled substance prescription history, CPMRS has a number of other features that assist in managing a patient's care, including:

- Access to out-of-state controlled substance prescription records through an interstate data exchange. Prescription data is currently shared with over 30 states (including all of Connecticut's border states), the District of Columbia, and Puerto Rico; and

- Access to automatic alerts that indicate a patient may be at high risk for abuse or overdose. CPMRS automatically generates three types of alerts when a patient's prescription record meets one or more criteria:
    - The patient received prescriptions from 5 different prescribers and had them filled at 5 different pharmacies within the preceding 3 months;
    - The patient was concurrently prescribed opioids and benzodiazepines; and
    - The patient's daily active morphine equivalent is greater than 90 milligrams.[6]

The number of unique patients who received one or more of the automatic alerts appears to have decreased by about 3% over the last 2 years, which could suggest safer prescribing habits. The average monthly number of unique patients with one or more alerts was 86,898 in 2017 and 84,520 in 2018.

Prescribers also have access to the recently implemented NarxCare report. Healthcare practices that have integrated patient records into an electronic health record already had this feature available for an additional fee. This report is another type of analytic tool that aggregates and analyzes practitioner and pharmacy prescription information and presents concise information, such as risk scores, to assist prescribers in attaining better patient outcomes. For example, every NarxCare report uses specific scores for narcotics, sedatives, and stimulants based on an algorithm factoring in patient risk factors. These include the number of prescribers, morphine milligram equivalents, pharmacies, and overlapping prescriptions with higher scores, signaling that a patient may be at high drug overdose or abuse risk. NarxCare also allows prescribers to post alerts or direct comments on particular patients concerning potential abuse, misuse, or diversion of controlled substances.

It is important to note that a high NarxCare score does not necessarily mean drug-seeking behavior is involved. Patients with chronic pain understandably can have large amounts of controlled substances prescribed to them, and the prescriber should determine whether the patient has a legitimate need for the pain medication.

Connecticut Prescription Monitoring and Reporting System prescriber features. CPMRS offers two other features that give healthcare practitioners more information about their prescribing habits. First, prescribers can examine their prescribing history to identify errors or forged prescriptions.

Second, the Department of Consumer Protection introduced a prescriber report card utilizing the 2018 Connecticut Prescription Monitoring and Reporting System data. Each quarter, DCP sends these one-page report cards, which provide a snapshot of practitioners' prescribing practices. For example, the report cards show a practitioner's prescribing history compared to their peers

[6] Milligram Morphine Equivalent (MME) is a value assigned to opioids to represent their relative potencies. MME is determined by using an equivalency factor to calculate a dose of morphine that is equivalent to the ordered opioid.

within their medical specialty, the top medications prescribed, prescription volumes, and number of patients that exceed certain prescribing thresholds.

Current process for dispensers. With a few exceptions, pharmacy and non-pharmacy dispensers (i.e., healthcare practitioners licensed by DPH and registered with DCP to prescribe controlled substances) must upload controlled substance dispensing activity into the Connecticut Prescription Monitoring and Reporting System at least every 24-hours. Veterinarians must upload this information at least weekly.[7] Any healthcare practitioner who can prescribe controlled substances, can also choose to dispense Schedule II – Schedule V drugs directly at their practice. Very few healthcare professionals actually dispense drugs at their practice. They prefer to write a prescription for the patient to fill at their community pharmacy.

Most dispensing pharmacies and healthcare practitioners must electronically upload patient-specific controlled substances information on dispensed drugs within 24-hour hours. Individual dispensers upload the data. For chain pharmacies, the data is uploaded by their central office.

The Department of Consumer Protection's database contractor, Appriss, collects the data, manages the program's technical aspects, and stores verified data for access by registered users. After dispensers submit the prescription data to Appriss, it processes the data, which can contain missing or invalid information. When Appriss identifies prescription data errors, it notifies the pharmacy by email. Appriss stores the transactions with serious errors in a clearinghouse until the pharmacy or healthcare practitioner corrects the data. The contractor uploads data minus serious errors into PMP with the incorrect or missing information. If a serious error is not corrected, the dispensed prescription information is never included in the Connecticut Prescription Monitoring and Reporting System. This may reduce the effectiveness of the program, because CPMRS does not contain complete controlled substance dispensing data.

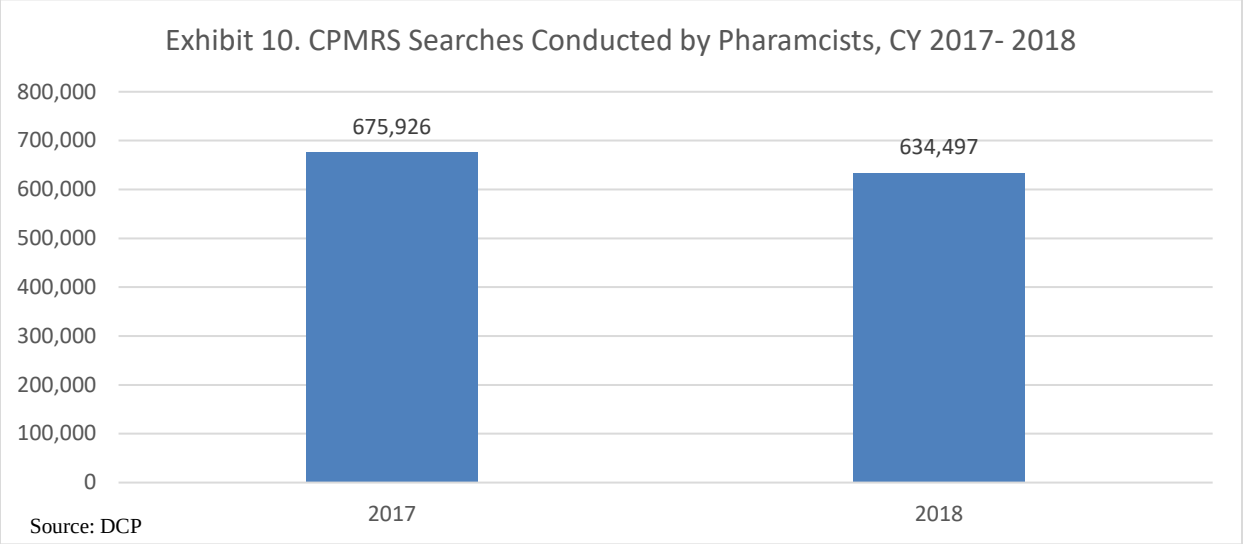
In addition, even if a pharmacy or other dispenser does not dispense controlled substances for a particular day or time-period, DCP policy requires them to upload a "zero" report. Appriss collects this information and uploads the data into the CPMRS so the department can determine dispensers who have not uploaded. DCP can exempt dispensers who are closed on weekends or holidays, but it has not completely identified them. Therefore, the department cannot appropriately monitor those that did not comply with the reporting requirement.

Dispensers are not required to conduct lookups. We note that there is a distinction between pharmacists and dispensing healthcare practitioners that must look up patient drug history when prescribing a controlled substance. The law does not require pharmacists to look up patient controlled substance prescribing history prior to dispensing such a drug, but many pharmacists register so they can voluntarily look up this information. In addition, certain pharmacy's internal policies may dictate that their pharmacists register and use the system. A recent statutory change

[7] Exceptions to the upload requirement include: inpatient hospitals; drugs administered directly to a patient by a prescriber as part of an out-patient procedure; any drug sample dispensed; any facility that is registered by the United States Drug Enforcement Administration as a narcotic treatment program; dispensing to inpatients in hospitals or nursing homes (exemption does not apply to assisted living); dispensing to inpatients in hospices (exemption does not apply to home hospice or hospice in an assisted living facility); and a practitioner that dispenses or administers directly to patients an opioid antagonist for treatment of a substance use disorder from a registered methadone clinic.

allows pharmacy technicians to perform this function, and requires them to inform the pharmacist of the results.

Exhibit 10 shows the number of searches by pharmacists in calendar years (CY) 2017 and 2018 and illustrates that many pharmacists look up patient controlled substance history before dispensing a drug. Pharmacist searches declined slightly, likely coinciding with the decline in opioids prescribed.



A pharmacist suspicious of drug misuse, abuse, or diversion, may take several actions, including:

- Contact the prescriber for more information
- Confiscate the prescription and refuse to fill
- Speak to the patient about misuse/abuse
- Contact law enforcement.

Connecticut Prescription Monitoring and Reporting System access for sworn law enforcement personnel and other investigators. State and local law enforcement, as well as federal Drug Enforcement Administration officers can use CPMRS to conduct a specific drug investigation or prosecution as long as they have an active case number. Department of Consumer Protection Drug Control Agents and Department of Public Health employees also can use CPMRS to investigate inappropriate prescribing practices. Department of Social Services (DSS) employees can access the system to investigate provider and client Medicaid fraud.

These agencies find access to the system extremely useful in their investigations. Their searches increased from 3,924 to 5,011 over the last two years. **Exhibit 11** shows the number of

law enforcement and state regulatory investigators that used CPMRS and the number of searches they conducted in CY 2018.

Exhibit 11. Law Enforcement CPMRS Searches, CY 2018

	Number of Registered Users 2018	Number that Used CPMRS 2018	Number of Searches 2018
Drug Enforcement Administration (Federal)	14	9	496
Office of Inspector General (Federal)	5	2	15
State Police	31	14	152
Local Police	241	114	1,987
Multijurisdictional Task Force	17	13	961
State Drug Control Agents	11	10	620
Medicaid Fraud Unit (DSS)	1	1	27
Medical Examiner/Coroner	11	9	753
Total	331	172	5,011

Source: DCP

Other users. In addition to prescribers and dispensers, other stakeholders have access to CPMRS data. These include:

- Department of Mental Health and Addition Services for certain grant development and compliance purposes
- Office of the Chief Medical Examiner engaged in a death investigation
- Public health researchers, who the Department of Consumer Protection approved to use de-identified parts of the database[8]

Program resources. The Prescription Monitoring Program receives funding from state and federal sources to support its functions. In FY 2019, federal grants supported the majority (60%) of its expenditures, with the balance from the state's General Fund. **Exhibit 12** shows the expenditures for the program for the last three fiscal years. Total expenditures increased by 178%. Sixty-three percent of the increase was due to additional staffing expenses associated with federal grants.

[8] De-identified data generally refers to data from which all personally identifiable information has been removed.

Exhibit 12. Prescription Monitoring Program Expenditures, FYs 17-19			
	FY17	**FY18**	**FY19**
Salary and Fringe	$190,501	$450,319	$611,171
Marketing/ Education	10,000	208,555	72,785
IT Software, Maintenance, and Support	173,750	165,500	357,561
Total	$374,251	$824,374	$1,041,517
Note: Salary and fringe included for federally funded positions Source: DCP			

Staffing was the largest expenditure, comprising about 59% of total expenses in FY 19. Staffing increased from 3.5 full-time equivalent employees in fiscal year (FY) 17 to 6.25 in FY 19.

The program is currently staffed by a Program Health Supervisor (who reports to the Director of the Drug Control Division), a Health Program Associate, and 4 Health Program Assistant 2s. An additional Health Program Supervisor, who oversees the Medical Marijuana Program (MMP), contributes about 25% of his time to the PMP function. Until September 2018, the PMP supervisor spent the majority of the time on MMP. Currently, federal grants fund 4 staff members.

Survey of healthcare practitioners. In October 2019, we conducted a 22-question survey of healthcare practitioners who held a controlled substance registration about their Connecticut Prescription Monitoring and Reporting System experiences. The Department of Consumer Protection provided us with email addresses for 26,995 practitioners, and we received 5,900 valid responses (22% response rate), although not all of the respondents answered every question.

Respondents. Exhibit 13 identifies survey respondents by type of healthcare practitioner. Most respondents identified as physicians or advanced practice registered nurses.

Exhibit 13. Licensed Profession of Controlled Substance Registrant		
Type of Healthcare Practitioner	**Number of Respondents**	**% of Total Responses**
Physician	2,814	49%
APRN	1,149	20%
Dentist	668	12%
Physician Assistant	495	9%
Veterinarian	276	5%
Optometrist	128	2%
Podiatrist	77	1%
Other	52	1%
Nurse Mid-Wife	42	1%
Total	5,701	100%

Active prescribers. About 40% of surveyed healthcare prescribers indicated that, although they held a controlled substance registration, they did not write prescriptions for controlled substances in the last month. **Exhibit 14** shows that only a small number of respondents wrote a large number of controlled substance prescriptions during the previous month.

This response supports interviews we conducted with many different types of prescribers. The majority of interviewees stated that they no longer wrote or wrote very few controlled substance prescriptions.

Exhibit 14. Number of Controlled Substance Prescription Written in the Last Month		
Prescriptions Written	**Number of Respondents**	**% of Total Responses**
None	2,196	39%
1 – 25	2,781	48%
26 – 50	448	8%
51-75	151	3%
76+	117	2%
Total	5,693	100%*

Because a large number of survey respondents had not written any controlled substances for the prior month, we focused our analysis on the 3,497 active prescribers who wrote at least one controlled substance prescription in the past month. The survey included questions about the ease of accessing the system; the accuracy of the information; and their opinion on the usefulness of the patient and provider information in CPMRS. The information presented below reflects the responses only of these 3,497 providers. **Appendix B** contains the full survey results.

Some providers never access the Connecticut Prescription Monitoring and Reporting System. Exhibit 15 shows how frequently the respondents accessed CPMRS during the previous month. Even though providers are required to look up a patient's controlled substance history before prescribing a new controlled substance prescriptions, 23% of survey respondents stated they never consulted CPMRS. While the prescriber has more time to check CPMRS for a refill, it is likely that at least some of the prescriptions written would have been for a new controlled substance. Even when we examined data for prescribers writing 76 or more controlled substances prescriptions per month, 17 of the 114 respondents (15%) stated they had not accessed CPMRS. Based on these responses, it would appear that some healthcare practitioners did not comply with the law. The Department of Consumer Protection should monitor these providers to ensure they are in compliance. (See the related finding and recommendation below.)

Exhibit 15. Frequency of Patient Lookups in CPMRS by Prescriber or Delegate when Prescribing Controlled Substance within Last Month		
Frequency of CPMRS Lookups	**Number Respondents**	**Percent of Total Respondents**
Daily	566	17%
Weekly	813	24%
Monthly	492	15%
Rarely	685	21%
Never	766	23%
Total	3,322	100%

Most practitioners find the Connecticut Prescription Monitoring and Reporting System useful. One survey question asked practitioners the reasons they access CPMRS. **Exhibit 16** shows

that the most common reasons were when practitioners prescribed a new controlled substance, or if they suspected drug misuse. Thus, despite the 23% of respondents who did not conduct patient lookups, the responses would appear to show that CPMRS is a good resource for most practitioners when evaluating treatment needs. The Department of Consumer Protection may want to provide increased education about the usefulness of CPMRS to practitioners who are not accessing it as required. This may encourage them to see the value of the system.

Exhibit 16. Reasons a Prescriber or Their Delegate Accesses the CPMRS		
	Number	**%**
Prescribing a controlled substance to a new patient	2,171	69%
Prescribing a refill to an existing patient	1,802	58%
Access a patient's controlled substance history if over-use suspected	2,113	67%
To ensure a patient is not doctor shopping	1,650	53%
When a patient requests an early refill	1,366	44%
Office policy to always check for every patient	1,114	36%
To monitor a medication taper	283	9%
To assist in making clinical decisions	1,128	36%
Other	225	7%

Alerts have changed prescribing patterns. As we noted, the Connecticut Prescription Monitoring and Reporting System generates 3 types of alerts about patients when a doctor views their controlled substance prescription history. We surveyed practitioners on which alerts changed their prescribing pattern for a patient. **Exhibit 17** shows that 2 of the alerts had the most influence on the 3,151 respondents in changing their prescribing decisions, while 42% percent of respondents said none. Many practitioners did not find the daily Morphine Milligram Equivalent (MME) alert useful, because they usually do not prescribe that high of a dosage of opioids.

Exhibit 17. Use of Patient Alerts in Making Prescribing Decisions		
	Number	**%**
Patient used 5 prescribers and 5 pharmacies within the last 90 days	1,376	44%
Daily MME > 90	633	20%
Concurrent prescribing of benzodiazepines and opioids	1,252	40%
None	1,335	42%

Prescriber report cards valuable, but more education is needed. The Department of Consumer Protection incorporated a new feature, prescriber report cards, into the Connecticut Prescription Monitoring and Reporting System in October 2018. CPMRS automatically generates the report cards for any prescriber writing a controlled substance prescription within the last 6 months, providing a snapshot of prescribing patterns. Of the 2,529 respondents who knew about the report card, 78% found it extremely, very, or somewhat valuable while 22% did not. However, an additional 634 (20%) of respondents were not aware the report card existed. This suggests that DCP should provide more education on the CPMRS features available to registrants. It should be noted that DCP only creates a report card for prescribers who wrote a controlled substance prescription within the last quarter.

Other survey highlights include:

- 71% of respondents who treat long-term care patients replied that DCP should include controlled substances dispensed to residents of long-term care facilities in CPMRS;

- 69% of respondents have not registered a delegate to access CPMRS on their behalf, even though they are legally allowed to do so; however, 43% stated that a lack of time was the greatest reason they are not accessing CPMRS as required;

- more than 60% of respondents stated that they always or sometimes look up patient controlled substance history even if they are writing less than a 72-hour supply of drugs, and even though it is not required;

- 44% of respondents stated they had changed their prescribing practices in the last 3 years as a result of conducting a patient lookup in CPMRS;

- 22% of respondents would like additional training to enhance their use of CPMRS; and

- only 4% of respondents believed CPMRS contains inaccurate information.

In addition, practitioners responded that they take several actions based on patient lookups. The most common actions taken were:

- Spoke with a patient about their controlled substance use (60% of respondents)

- Spoke with a patient about the danger of addiction to controlled substances before writing a prescription (50%)

- Confirmed a patient had a legitimate need for the prescription (46%)

- Reduced or eliminated a controlled substance prescription for their patient (43%)

Open-ended responses. The last survey question asked practitioners whether they had any other concerns about CPMRS or would like to suggest improvements. Practitioners provided more than 425 comments, which we grouped into eight categories starting with the most frequent. They include:

1. Integrate system with electronic health records so accessing CPMRS is seamless and easier.

2. Make CPMRS more user-friendly by requiring less frequent password changes; present patient information so it is easier to grasp quickly, since many stated they are overworked and do not have time for lookups.

3. People receiving Methadone should be included in CPMRS to give practitioners a more complete picture of patient history and the potential for abuse (as noted previously, federal law prohibits the inclusion of Methadone in a state's PMP).

4. CPMRS is missing prescription data. Several practitioners question the accuracy of CPMRS because they wrote a controlled substance prescription for a patient after it was dispensed, but when they looked for it, it was not in the system.

5. Many prescribers thought their report cards did not accurately reflect their medical specialty, or their type of practice erroneously flagged them as high prescribers.

6. Include more information for prescriptions written in other states to show patients who see in and out-of-state prescribers.

7. Some thought they should be excluded from lookup requirements, particularly veterinarians who do not find CPMRS useful to their practice.

8. DCP staff need to be more responsive in correcting CPMRS errors and answering questions about the system.

In addition, some practitioners found the system very helpful and stated that CPMRS helped them make clinical decisions, which enhanced patient care. Others thought the system was a waste of time and the patient lookup requirements, especially for long-standing patients they know, were onerous.

Pharmacists find the Connecticut Prescription Monitoring and Reporting System useful. We were given access to the results of a University of Connecticut's School of Pharmacy survey of pharmacists. The survey was conducted in the spring of 2019 to understand how pharmacists use the CPMRS. Although the number of responses was small (258 out of 6,103 licensed pharmacists), it seems to indicate that pharmacists find CPMRS useful. **Exhibit 18** shows the percentage of respondents who use CPMRS "always" or "most of the time" to help them make certain dispensing decisions.

Exhibit 18. % of Pharmacists who Answered that they use CPMRS for Making Certain Dispensing Decisions

Type of Decision	%" Answering "Always" (100% of the time) or "Most of the Time" (75-99% of the time)
Dispensing medications	46%
Declining to dispense medications	59%
Determining whether a patient is using an opioid	68%

Exhibit 19 outlines the top 5 reasons why pharmacists access the Connecticut Prescription Monitoring and Reporting System. Chief among them are concerns about opioids and patients who want to pay for a prescription in cash. Using cash to pay for a controlled substance is widely considered a red flag that typically triggers more scrutiny from pharmacists. Interestingly, 57% of

the respondents cited state regulations as the reason for using CPMRS, although the state does not require it.

Exhibit 19. Top 5 Primary Reasons Pharmacists use CPMRS	
Reason	**% of Respondents**
Patient has a prescription for an opioid	79%
Patient wants to pay for prescription in cash	72%
Pharmacy-developed dispensing protocol	61%
Patient is on several medications	58%
State regulations	57%

Connecticut has adopted many prescription monitoring program best practices. Brandeis University, under the auspices of The Heller School for Social Policy and Management, operates a Prescription Drug Monitoring Program Training and Technical Assistance Center. It focuses on facilitating uniformity among state PMP, improving coordination between PMP and state and national stakeholders, measuring PMP performance and effectiveness, and promoting PMP best practices and policies.

In 2012, the center published a report that identified a list of best practices for states to adopt and incorporate into their prescription monitoring programs. The center issued another report in 2017, based on its 2016 survey of state PMP managers. The survey sought to determine the number of PMP best practices states had implemented. Connecticut was one of 6 states that did not respond to the survey. The center conducted the survey to develop a baseline so that it could measure state progress in future assessments. In addition, the center stated that it would continue to update the list as it discovers new, and revises existing, best practices.

The center's two reports note that all states do not implement all of the best practices identified. This is due to a lack of staffing and/or financial resources; a lack of policy agreement by lawmakers; and stakeholder opposition to mandating them rather than allowing them to use their professional judgment in treating their patients.

The center developed 67 best practices/policies within 7 broad categories. **Exhibit 20** shows the number of practices by each category, and the number and percentage implemented in Connecticut. The exhibit illustrates that Connecticut has adopted many of the best practices through legislation and policy. In addition, the Department of Consumer Protection informed us that several of the practices/policies that have not been adopted are under consideration. **Appendix C** contains a detailed list of each practice, and whether Connecticut has adopted it.

Exhibit 20. Best Practices and Number Implemented by Connecticut's PMP			
# of Practices	**Practice Category**	**# Achieved**	**% Achieved**
9	Data Collection and Data Quality	5	56%
7	Data Linking and Analysis	4	57%
28	User Access and Report Dissemination	16	57%
11	Enrollment, Outreach, Education, and Utilization	7	64%
3	PDMP Promotion	3	100%
3	Inter-Organizational Coordination	2	67%
6	PDMP Usability, Progress, and Impact	2	33%
67	Total Overall Practice Adoption	39	58%

It should be noted that the Brandeis' Training and Technical Assistance Center does not consider all of the practices of equal importance, and the center is more concerned with lower rates of adoption for certain practices. The center believes the more important practices include monitoring that healthcare practitioners are conducting patient lookups in accordance with the law, instituting effective data correction procedures, and sending prescriber report cards. DCP has generally performed well, implementing many of the center's best practices and adopting several of them at a greater rate than many other states. However, the findings and recommendations section of this report notes several areas in which DCP needs to make improvements to safeguard data accuracy and ensure that prescribers and dispensers comply with laws and regulations.

Research on the effectiveness of prescription monitoring programs. There is some evidence that prescription monitoring programs are somewhat effective for healthcare, law enforcement, and regulatory purposes, but they also may lead to unintended consequences. It is important to note that the research on PMP effectiveness is often limited for several reasons. The programs are not static and are often changing through legal mandates, practices, or technology, which makes long-term comparisons challenging. In addition, states implement their monitoring programs differently. Some were more proactive (e.g., send out unsolicited reports) and others more reactive (e.g., send only solicited reports)[9], and studies do not always account for those differences.

In addition, there are always multiple factors to consider in any study that occur simultaneously and whose individual impact can become difficult to distinguish. Often, the prescription monitoring program's implementation or significant changes to the program are part of a larger effort to educate healthcare prescribers and reduce prescription drug abuse or diversion. This makes it difficult or impossible to determine the impact any single change had on the measured outcomes. Below are examples of PMP effectiveness research.

- A 2002 federal General Accounting Office (now the Government Accountability Office) report found that "the time and effort required by law enforcement and regulatory

[9]Unsolicited reports are on patients meeting certain criteria for possible inappropriate use, such as using multiple prescribers and pharmacies in a short time period, that are typically automatically sent to medical providers or law enforcement agencies that have not been requested by the users. Solicited reports are specifically requested by authorized users.

investigators to explore leads and the merits of possible drug diversion cases" declined after PMP implementation.

- A 2012 article summarized the 11 existing peer-reviewed research articles about PDMP published between 2001 and 2011 (not all of which addressed effectiveness). The findings of the articles confirmed "that PDMPs limit doctor shopping and reduce prescription drug abuse. Furthermore they impact prescribing practices, resulting in fewer prescriptions being written for controlled substances."

- In 2014, the Prescription Drug Monitoring Program Center of Excellence at Brandeis University (now referred to as the PDMP Training and Technical Assistance Center) summarized over 60 research studies, surveys, reports, and data suggesting that prescription monitoring programs "are effective in improving medical care; reducing doctor shopping, inappropriate prescribing, drug diversion, and prescription fraud; and assisting in drug investigations."

- Prescription monitoring programs also may be a factor in reducing mortality associated with opioid use. A 2016 study of 34 states' experiences found that the rate of opioid-related deaths had a modest decline in states in the year after the implementation of Prescription Monitoring Programs, especially in state programs with more "robust features" (e.g., more frequently updated data, greater number of drugs being monitored).

- Another 2017 study did not find an association between having a prescription monitoring program and the subsequent abuse of opioids (including heroin). However, it found a significant association between PMP implementation and a reduction in patient doctor shopping without increasing reliance on illegal sources or social sources (relatives or friends) to obtain opioids.

A concern related to the effectiveness of prescription monitoring programs is the potential for unintended consequences of efforts to reduce opioid drug diversion and abuse. Several reports indicate that the existence of PMP may suppress the availability of opioid medications for appropriate medical purposes. Some patients with chronic pain believe they have been left with few alternatives to manage their symptoms as doctors face increasing pressure to decrease prescribing opioids and stop treating patients with chronic pain. Other patients reported that their prescribers have weened them off opioids too quickly and inappropriately. We interviewed various medical practitioners, and our survey results anecdotally confirmed that they have significantly changed prescribing practices. Many prescribers avoid writing opioid prescriptions and often refer patients with chronic pain to pain management specialists.

One 2016 study found that, across 24 states, the implementation of a prescription drug monitoring program was accompanied by a more than 30% reduction in the prescribing rate of Schedule II opioids. This reduction was seen immediately following the launch of the program, and continued in the second and third year. Significantly, the study could not evaluate whether patients' pain management needs were adequately met. In addition, with the intense focus on

opioids, other drugs like cocaine and crystal methamphetamine have experienced a surge in certain parts of the country. There are reports, but no definitive studies, that suggest that individuals are substituting those drugs for less available prescription opioids. Strategies to respond to opioid abuse are fundamentally different than responding to cocaine or methamphetamines.

STATE AUDITORS' FINDINGS AND RECOMMENDATIONS

This section of the audit report presents the State Auditors' findings and recommendations. Some of the findings have multiple corresponding recommendations.

Finding 1: The Department of Consumer Protection cannot confirm whether all healthcare practitioners are registered with the Connecticut Prescription Monitoring and Reporting System (CPMRS) as required by law.

Criteria: Since 2013, state law has required all healthcare prescribers with a Department of Consumer Protection-issued controlled substance registration to register with the Connecticut Prescription Monitoring and Reporting System (CPMRS).

Condition: Not all prescribers are registered with CPMRS as required by law. DCP has only recently begun to identify those controlled substance prescribers who have not registered and are initiating enforcement actions. This involved matching controlled substance registrations with CPMRS registrations to identify those who have not registered. According to DCP staff, this has been a time-consuming process. To date, DCP sent compliance letters to individuals the department identified as unregistered. DCP continues to reconcile the two databases, so it does not have the exact number of unregistered practitioners.

According to DCP, it appears the number of registered prescribers increased from 26,015 in 2017 to 28,791. DCP staff informed us that they believe there have been improvements in the number of prescribers registering with CPMRS for a number of reasons. DCP conducted several educational sessions for prescribers so there is a greater awareness of the registration mandate. In addition, DCP noted that providers' professional associations have conducted outreach about the CPMRS requirements.

Practitioner interviews and survey responses indicate that there has been very few complaints with the ease of the registration process. Survey results showed that 60% of respondents thought registering with CPMRS was very or somewhat easy, while only 14% thought the process was very or somewhat difficult. In addition, CPMRS registration is free, so cost is not a barrier to registering.

Effect: Unregistered healthcare practitioners who prescribe controlled substance drugs did not comply with the law and may not have been fully aware of their patient population potentially at high risk for drug misuse, abuse, and addiction.

Cause: Some healthcare prescribers have not registered with CPMRS because they:

- Maintain a controlled substance registration, but do not write these type of prescriptions; therefore, they do not realize they must register with CPMRS. Some have active practices, while others retired or moved out of state;

- Have multiple practice locations, and if they dispense controlled substance drugs directly at their office, they are required to have a separate controlled substance registration for each location. As a result, DCP has had difficulty performing a one-to-one match (the number of controlled substance registrations in the database overstates the actual number of individuals holding these registrations.); or

- Intentionally have not signed up.

According to DCP, possession of a controlled substance registration is considered a property right, and the department must follow the Uniform Administrative Procedures Act (UAPA) process before it can suspend or revoke a licensed practitioner's registration for failure to register with CPMRS. This process involves several steps, and it is resource intensive. This slowed the department's ability to act quickly in enforcing the law and fully ensuring practitioner compliance. However, if a practitioner's Department of Public Health license has lapsed, by strengthening the relevant statute, DCP could be granted the authority to deactivate the practitioner's controlled substance registration without adhering to the UAPA process.

Recommendation: The Department of Consumer Protection should seek to amend Section 21a-319 of the General Statutes to allow it to deactivate the controlled substance registration for anyone no longer licensed by the Department of Public Health. If DPH reinstates a practitioner's license, the Department of Consumer Protection should reactivate the practitioner's controlled substance registration at no charge if the controlled registration period has not expired. **(See Recommendation 1.)**

Agency Response: "The Department agrees with your recommendation regarding C.G.S. Sec. 319 and submitted a proposal for the 2020 legislative session to accomplish what is being recommended."

Recommendation: The Department of Consumer Protection should ensure all practitioners with active licenses issued by the Department of Public Health register with the Connecticut Prescription Monitoring and Reporting System, The department should continue any related enforcement actions and

validate that practitioners are registered with CPMRS when they renew their controlled substance registration. **(See Recommendation 2.)**

Agency Response: "The Department agrees with your recommendation that we should continue with our enforcement efforts. We are proud of the efforts that have been underway since 2017 to improve compliance with mandatory registration in the CPMRS. We also agree that at the time of renewal of the CPMRS registration validation should occur. At this point in time, a manual process of validation would take significant resources from the Department and any software change would likely add cost for the development and maintenance of the program."

Finding 2: The Department of Consumer Protection does not enforce or track that healthcare prescribers conducted mandatory lookups in the Connecticut Prescription Monitoring and Reporting System.

Criteria: Prior to prescribing a controlled substance to a patient, the law mandates that prescribers (or their delegate) look up a patient's controlled substance prescription history in the Connecticut Prescription Monitoring and Reporting System. This helps to provide prescribers with the patient's complete controlled substance history to avoid misuse or abuse of certain drugs. If the prescriber intends to delegate the responsibility to a staff member, they also must register the delegate with CPMRS. Depending on whether the prescription is for a new drug or a refill, the prescriber must follow different CPMRS lookup requirements. Prescribers are required to consult PMP when prescribing more than a 72-hour supply of a new controlled substance, every 90 days for most refills, and annually for a few Schedule V drugs.

Condition: DCP does not track whether healthcare prescribers comply with statutorily mandated patient lookup requirements.

Although DCP presents data in various presentations and reports, these provide only gross measures of the number of providers holding controlled substance registrations, the number who registered with CPMRS, and the aggregate number of patient lookups. In 2018, there were over 1.2 million lookups by prescribers and 634,497 by pharmacists. However, there is no data to show whether a small number of providers conducted the majority of lookups, and whether certain providers did not comply with the law.

For example, DCP reports that there were 31,242 controlled substance registrations in 2018. Of those, 18,414 registrants wrote at least one controlled substance prescription. However, a practitioner can have multiple controlled substance registrations if they dispense at different practice locations. Therefore, we do not know how many unique

controlled substance registrants exist. Furthermore, although registrants conducted almost 1.4 million patient searches in calendar year 2018, we cannot assess the level of practitioner compliance with the law, because DCP cannot determine whether all registrants who wrote a controlled substance prescription checked CPMRS prior to writing it.

In February 2018, Prescription Monitoring Program staff began an education campaign funded by federal grants from the Department of Justice and the Centers for Disease Control and Prevention, called "CHANGE the SCRxIPT." The campaign targeted healthcare prescribers to increase their CPMRS registration and usage, inform them about the available CPMRS tools and features, and explain the legislative mandates.

Currently, DCP does not have a system to determine whether prescribers are checking CPMRS as required by statute. DCP only checks prescriber CPMRS compliance if the Drug Enforcement Unit receives a prescribing or patient abuse/misuse complaint. DCP could not provide reliable statistics on how often this occurs or quantify how many times it took action because of a prescriber's failure to look up a patient's history in CPMRS.

We interviewed practitioners who wrote controlled substance prescriptions, and some indicated that they never look up patient history in CPMRS even when they write a prescription for more than a 72-hour supply. Others found it very useful in treating their patients. Interviews and survey results suggest that practitioners are not using the system as intended for several reasons. We noted that 23% of survey respondents never look up patients in the system even though they had written a prescription for a controlled substance within the prior month. Survey results also show variation among the survey responses and some specific comments included:

- The need for a separate system and not integrated with their office's electronic health record system
- Frequent password changes
- Need to reenter patient data because software is not user friendly
- Do not feel it is relevant to their practice specialty
- Rely on their own professional judgment

- Even though they hold controlled substance registration, they rarely write them or only write for less than 72-hours; therefore, they are not required to look up patient history

Appriss (the DCP contractor) offers a Mandatory Use Compliance Module, which is being tested in some states. This tool could track prescriber compliance with these mandates. However, DCP would have to purchase this module and pay an initial and ongoing maintenance fee. The software also allows prescribers to look up their own history to determine their compliance with the law.

Effect: Although DCP provides education and training to prescribers mandated to use CPMRS, the department currently cannot aggregately measure compliance with the law.

Cause: DCP does not have a system in place to track prescriber compliance with the CPMRS statutory lookup requirements. Currently, off-the-shelf software does not exist that would allow DCP to better track prescriber compliance. DCP or the Department of Administrative Services Bureau of Enterprise Systems and Technology would have to develop an in-house technology solution or a manual process using sample data. This may prove time consuming.

Recommendation: The Department of Consumer Protection should develop a system to ensure practitioners are meeting lookup requirements or consider incorporating the refined Appriss Mandatory Use Compliance Module so it can improve its monitoring of practitioner compliance with the law. The department should initially focus on healthcare practitioners who prescribed large amounts of Schedule II controlled substances, but have never conducted a patient lookup on the Connecticut Prescription Monitoring and Reporting System. The department should also educate prescribers about the requirements of the law. **(See Recommendation 3.)**

Agency Response: "We agree that it would be helpful to acquire the Mandatory Use Compliance Module when it is available. The Department intends to begin a proactive process of reviewing the mandatory usage requirements of practitioners after it has completed the mandatory registration action. Mandatory usage review requires more investigative work to validate the information in the CPMRS and the Department has not received any resources for that purpose. As you point out, the Mandatory Use Compliance Module is still being tested, and once it is available, purchasing it would require additional resources. The software would still not alleviate the work of investigators and support staff."

Finding 3: The Department of Consumer Protection inadequately monitors dispenser uploading requirements.

Criteria:

Compliance monitoring is important because it helps ensure that the regulated community obeys state laws, regulations, and department policies. With some exceptions, pharmacy and non-pharmacy dispensers are required to immediately (within 24-hours) upload all controlled substance dispensing activity into the Connecticut Prescription Monitoring and Reporting System (except for veterinarians who must upload at least weekly).[10] Non-pharmacy dispensers include healthcare practitioners, who hold a controlled substance registration, and choose to dispense prescription drugs directly from their practice location, including Schedule II – Schedule V controlled substances. If the pharmacy or health care practitioner's office is closed on weekends or holidays, the upload must occur within the next available business day that the office is open.

If a pharmacy or other dispenser does not dispense controlled substances on a day when they are open, DCP policy requires them to upload a "zero" report so the department may identify those dispensers with no controlled substance dispensing activity.

Condition:

DCP staff cannot identify all dispensers who are required to report controlled substance prescription data, nor does the department adequately monitor known dispensers to ensure they upload all controlled substance information to CPMRS (including "zero" reports). DCP cannot ensure CPMRS is complete and accurate.

DCP cannot identify the universe of dispensers. DCP has had several problems identifying all dispensers required to comply with the law. The reasons include:

- The DCP list of dispensers required to upload to CPMRS is not up-to-date and includes duplicate records in some cases, because practitioners are required to submit data individually, even though they may belong to a group practice and perform a single upload for the entire group

[10]Exceptions include: inpatient hospitals; drugs administered directly to a patient by a prescriber as part of an out-patient procedure; any drug sample dispensed; any facility that is registered by the United States Drug Enforcement Administration as a narcotic treatment program; dispensing to inpatients in hospitals or nursing homes (exemption does not apply to assisted living); dispensing to inpatients in hospices (exemption does not apply to home hospice or hospice in an assisted living facility); and a practitioner who dispenses or administers directly to patients an opioid antagonist for treatment of a substance use disorder from a registered methadone clinic.

- The total number of healthcare practitioners who dispense controlled substances directly from their practice location is unknown

- DCP staff does not retroactively check the database to determine:

    - Pharmacies are in busy locations, but show a low number of controlled substance prescriptions have complete uploads

    - An open dispenser failed to submit "zero" reports, as required by DCP policy

Unknown number of dispensers that fail to submit data. In addition, DCP does not have a system to ensure all dispensers provide the required prescription information. Appriss, the DCP CPMRS database contractor, collects all controlled substance data, manages the technical aspects of the CPMRS program, and stores the verified data for access by registered users. Appriss provided data on the number of dispensers who are required to upload controlled substance prescription data and identified those who failed to submit data.

Appriss provided us data that showed there were 1,125 Connecticut dispensers required to upload information as of December 3, 2019. This included 737 pharmacies, 194 healthcare practitioners, and 194 veterinarians. We tried to identify the number of dispensers who complied with the uploading law, but there were too many caveats associated with the data to provide an accurate count. First, the identification of dispensers is based on information DCP provided to Appriss. Dispensers enter themselves into the system and DCP obtains this information from these entries. DCP does not consistently manage its list of active prescribers. DCP does not regularly remove pharmacies that are closed or were sold or prescribers who no longer dispense drugs, have moved out-of-state, or no longer practice. Consequently, the Appriss data shows them as noncompliant with the law. In addition, there could be additional prescribers unknown to the department, because they have not registered to upload their controlled substance dispensing data. As we noted above, for group practitioners, the list includes the individual healthcare practitioner as well as the name of the group that may submit for all of its individual practitioners. Thus, the data erroneously show these practitioners did not comply with the law.

Appriss does not follow up on delinquent dispensers who have not uploaded data, and cannot readily determine whether those dispensers eventually submitted. DCP has the capability to actively manage dispensers by generating an Appriss-produced ad hoc report that could

identify dispensers who failed to upload data on any given day. The department does not utilize this tool.

Accuracy of data not checked during inspections. The Department of Consumer Protection is required by statute to inspect each pharmacy at least once every 4 years. The inspection process could be an opportunity to check and enforce compliance with the CPMRS uploading requirements. Some states regularly compare a sample of records in their prescription monitoring system with a pharmacy's actual prescription dispensing during inspections. This would help ensure that the CPMRS data is accurate and matches the actual uploaded prescriptions. However, DCP does not compare a sample of the pharmacy's actual prescription data with the information uploaded to CPMRS. During the course of our audit, we also noted that certain high-volume retail pharmacies uploaded very few controlled substance prescriptions. DCP could not explain this situation. This may indicate that the pharmacies underreported their dispensing numbers. DCP does not identify these pharmacies, because the department does not check them during the inspection process.

In addition, there is not a similar regular inspection requirement for non-pharmacy dispensers who are healthcare practitioners. In fact, DCP does not regularly inspect those dispensers, and only does when it receives a complaint.

Effect: Incomplete data in CPMRS reduces the effectiveness of the program. Because CPMRS is missing complete patient profiles of controlled substance use, prescribers and pharmacists who check the database do not have an accurate picture of patient-controlled substance use. This increases the risk for misuse, abuse, and diversion of these drugs. In addition, if prescribers do not believe CPMRS is accurate and does not contain all patient-controlled substance history, they may be more reluctant to access CPMRS even though they are required to do so.

Cause: There are four reasons why some dispensers may not be uploading controlled substance data:

1) Technological (dispensers unaware data is not transmitting).

2) Lack of knowledge (unaware of law or regulations).

3) Intentional noncompliance (do not feel obligated to report or possible diversion occurring).

4) A practitioner has wrongly self-identified as a dispenser. In addition, dispenser compliance with uploading requirements is hampered by

DCP's lack of active monitoring or enforcement of these requirements. In addition, the pharmacy commission and PMP do not adequately communicate regarding the status of pharmacy ownership and operations.

Incorrect dispenser self-identification. DCP does not know the universe of dispensers in Connecticut and, therefore, cannot conduct appropriate monitoring to identify who failed to upload controlled substance prescription data to CPMRS. The DCP controlled substance registration application asks whether the prescriber also dispenses controlled substance medication at their practice location. Many applicants answer "yes" to this question, but according to DCP staff, that is because many prescribers do not understand the distinction between prescribing and dispensing. DCP could use this information to determine whether a dispenser should be uploading data into CPMRS.

During the 2019 biennial renewal of their controlled substance registration application, 6,293 health care practitioner applicants identified as dispensers (this excludes pharmacies that do not possess a controlled substance registration). However, Appriss showed only 1,125 dispensers. This means that DCP likely overstates the number of dispensers of controlled substances.

Lack of monitoring. DCP also does not monitor pharmacies that appear to have uploaded a low number of controlled substance prescriptions to CPMRS even though they are in a busy location or open 24-hours. These questionable numbers should prompt DCP pharmacy inspection staff to conduct site visits of these pharmacies to verify they uploaded accurate data to CPMRS.

Furthermore, DCP does not identify dispensers who failed to submit zero reports in violation of department policy, and does not contact them to determine whether there is a legitimate reason they did not file these reports.

Although the department can electronically exempt dispensers who are closed on weekends or holidays, DCP staff have not completely identified all of those who qualify for an exemption. Therefore, DCP likely inflates the number of noncompliant dispensers.

Communication with the pharmacy commission. The Connecticut Commission of Pharmacy is staffed by DCP. The commission receives notification if a pharmacy is closing or sold, but does not always provide this information to Prescription Monitoring Program staff so they can update the database to identify pharmacies that are no longer required to upload data. Better communication from the commission to PMP

would help identify delinquent pharmacies so PMP can take further action.

Recommendation: The Department of Consumer Protection should develop a process to identify dispensers who fail to upload controlled substance prescription data to the Connecticut Prescription Monitoring and Reporting System. The department should monitor dispensers who fail to report any prescriptions on a given day and notify them to ensure they comply with the law or be subject to sanctions. **(See Recommendation 4.)**

Agency Response: "The Department agrees that more can be done to identify dispensers that fail to upload data into the CPMRS. This work, however, will require additional resources as it is very time intensive. Dispensers are located both in the state of Connecticut and outside of the state and multiple variables including days the dispensing location is scheduled to be closed regularly, closed for holiday, or closed for emergency create a significant number of challenges to identifying dispensers that are out of compliance. Currently, there are only two general fund employees responsible for the management and oversight of the CPMRS and any data analysis, compliance and enforcement activity generated from the data in the database. In cases where validation of the data is required at the dispenser, the Drug Control Agents and Legal Department will be impacted as a respondent is entitled to an opportunity for a hearing to dispute the Department's findings."

Recommendation: The Department of Consumer Protection should develop a process to identify and notify delinquent dispensers that they are legally required to upload daily any controlled substances dispensed or a zero report if they did not dispense any. The department should penalize dispensers who are continually delinquent. **(See Recommendation 5.)**

Agency Response: "The Department agrees with the recommendation. Monitoring of zero reports and failure to upload are time intensive tasks that require investigation to verify the need for uploading. Likewise, enforcement activity requires significant resources as a respondent is entitled to an opportunity for a hearing to dispute the Department's findings."

Recommendation: The Department of Consumer Protection should require individuals who no longer dispense prescription drugs to formally notify the department. **(See Recommendation 6.)**

Agency Response: "We disagree with this recommendation. The law requires that any prescribing practitioner notify DCP of their intention to dispense during the biennial renewal. Requiring practitioners to formally notify the department when the practitioner no longer dispenses prescription drugs would require a law change. Additionally, dispensing by practitioners is

not always linear in nature in that they do not necessarily have specific start and stop date."

Auditors' Concluding Comments: The Department of Consumer Protection cannot determine whether a dispenser complied with the law and department policy to upload data or a zero report each day if the department does not know the population of dispensers in Connecticut.

Recommendation: The Department of Consumer Protection controlled substance registration application should clarify the difference between prescribing only or prescribing and dispensing to ensure that non-dispensing prescribers do not inadvertently identify as dispensers. The application should contain prescriber-only and prescriber/dispenser designations. The department should charge a separate registration fee for prescriber/dispensers. **(See Recommendation 7.)**

Agency Response: "DCP agrees, in part, with this recommendation. Making a clearer distinction between prescribing and dispensing, and doubling the fee for those that do both, would provide a clear line of the difference between the two registration types and would make enforcement easier. This change, however, would require legislation."

Recommendation: As part of its pharmacy inspection process, the Department of Consumer Protection should measure the accuracy of the Connecticut Prescription Monitoring and Reporting System by reviewing a sample of dispensed controlled substance prescriptions and comparing it to the system data to ensure it includes all required prescriptions. **(See Recommendation 8.)**

Agency Response: "We agree with this recommendation. The Department has been in the process of purchasing and implementing a mobile inspection software solution. Adding a module to the mobile inspection report for pharmacies that reviews prescriptions submitted versus prescriptions dispensed has been discussed. This will require the Department to use more resources either in the Drug Control Agent area or the PMP area or both."

Recommendation: The Department of Consumer Protection should perform random inspections of a portion of non-pharmacy dispensers. **(See Recommendation 9.)**

Agency Response: "We agree with this recommendation, but caution that it would likely lead to a number of false positives that would then need to be looked at further. This recommendation would require a significant number of resources both in the PMP and Drug Control Agent areas of the Drug Control Division and would likely impact the Legal Department also."

Finding 4: The Department of Consumer Protection does not monitor whether dispensers corrected erroneous uploaded prescription data.

Criteria:

Complete and valid Connecticut Prescription Monitoring and Reporting System controlled substance data is essential to support practitioners who use the database to help reduce patient drug misuse, abuse, and diversions. Best practices identify three areas to ensure integrity of Prescription Monitoring Program data:

1. Identify the universe of dispensers
2. Ensure the timely transmission and quality of data
3. Identify errors and ensure they are corrected

Condition:

After dispensers submit controlled substance prescription data to Appriss, it processes the data, which sometimes contains missing or invalid information. When Appriss identifies inaccurate prescription data, it emails the pharmacy. Transactions that contain serious errors are not loaded into CPMRS but stored by Appriss in a clearinghouse until the error is corrected or they remain in the clearinghouse for a rolling 12-month period and then are expunged if the dispenser does not correct them. Appriss still uploads less serious errors into CPMRS with the incorrect or missing information.

Although DCP staff believe the vast majority of dispensers are in compliance with uploading requirements, the department does not monitor dispensers that fail to meet those requirements or examine the types and total numbers of uncorrected errors.

According to data provided by Appriss, the most common errors that prevent controlled substance prescription data from being included in CPMRS are missing or invalid prescriber DEA or NPI numbers, missing or invalid pharmacy DEA numbers, missing or incorrect dispensation information (quantity, days/supply, NDC#), and missing patient demographic information. When an error occurs, Appriss only notifies the dispenser of the error. However, DCP is responsible for ensuring the dispenser corrects it.

Appriss provided us data, and we identified 23,512 prescriptions that 134 dispensers submitted with at least one error (12% of the 1,125 required to submit). These prescriptions were not included in CPMRS from October 2018 to October 2019. Although the number of prescriptions with errors represents less than 1% of the controlled substance prescriptions dispensed during this time, it still could have a negative effect on patient care if a prescriber does not have a complete

picture of a patient's controlled substance history. Appriss could not easily identify the number of corrected dispenser errors that it ultimately included in CPMRS.

Effect: Uncorrected errors that are not included in the Connecticut Prescription Monitoring and Reporting System raise serious concerns about the data quality and reduce the benefit of the system for prescribers.

Cause: DCP does not monitor dispensers who have errors and, therefore, has not taken action against dispensers who consistently upload faulty controlled substance prescription data. DCP would have to require Appriss to provide the department with an error report so it could ensure the dispensers correct their errors.

Recommendation: The Department of Consumer Protection should amend its contract to require Appriss to provide routine error reports. **(See Recommendation 10.)**

Agency Response: "The Department agrees that it would be helpful for the contract with Appriss to be amended to provide for DCP to receive error reports. The contract was negotiated in conjunction with the Department of Administrative Services (DAS) and the Bureau of Enterprise System Technology (BEST). The Department will review this contract and discuss the possibility of acquiring the reports suggested. The vendor may charge for any modification to the existing software."

Recommendation: The Department of Consumer Protection should remind all dispensers of the requirement to upload accurate controlled substance data. The department should educate dispensers on how to avoid common errors that prevent data from uploading into the Connecticut Prescription Monitoring and Reporting System. In addition, the department should inform dispensers that failure to correct serious errors within 14 business days or consistently uploading data with errors, may subject them to sanction or referral to the appropriate regulatory board or commission for further consideration. **(See Recommendation 11.)**

Agency Response: "DCP disagrees with this recommendation because it suggests that the Agency is not already communicating with dispensers. The Department puts documents provided by Appriss, customized for Connecticut, up on the website for dispensers. In addition, we support dispenser phone calls regarding errors and resolutions where possible. Appriss provides a technical support help desk as part of the contract to help dispensers with uploading and error resolution questions. DCP agrees that there is always more that can be done, which is why we intend to add this information to a training manual that is being developed and will be

shared with dispensers and we will review our website to attempt to improve the ability for dispensers to acquire relevant information."

Auditors' Concluding Comment: DCP should remind dispensers about the law and department policy about uploading controlled substance reports. The department does not identify noncompliant dispensers. As a result, it has not enforced the law and has failed to notify dispensers of their responsibilities. The department should inform dispensers that failure to submit required information may subject them to penalties.

Recommendation: As part of its pharmacy inspection process, the Department of Consumer Protection should generate a random sample of prescriptions listed in the Connecticut Prescription Monitoring and Reporting System and compare it to the actual prescriptions at the pharmacy being inspected to ensure information is complete and has been accurately uploaded. **(See Recommendation 12.)**

Agency Response: "We agree with this recommendation. The Department has been in the process of purchasing and implementing a mobile inspection software solution. Adding a module to the mobile inspection report for pharmacies that reviews prescriptions submitted versus prescriptions dispensed has been discussed. Implementing this recommendation will require the Department to use more resources either in the Drug Control Agent area or the PMP area or both. Alternatively, DCP would have to reduce its enforcement in other areas in order to incorporate this change to the pharmacy inspection process."

Finding 5: The Department of Consumer Protection lacks a formal enforcement strategy and system to accurately track and report on its drug control enforcement activities.

Criteria: The ability to track Department of Consumer Protection complaint investigations involving controlled substance abuse or diversion is important in ensuring enforcement activities are effective in protecting public health and safety. Having program data allows managers to understand what employees conducting investigations have achieved to measure progress toward desired results and make relevant course corrections. In addition, reporting on program activities and results provides vital information to policymakers and the public.

Condition: We requested any drug control enforcement data that involved the use of the Connecticut Prescription Monitoring and Reporting System prescription information to investigate suspicious activity by any controlled substance registrant, pharmacists or other individuals, and cases alleging violations of mandatory aspects of the Prescription Monitoring Program. This would include such violations as prescribers who failed to perform the mandatory CPMRS lookup prior to

prescribing a patient more than a 72-hour supply of a controlled substance for the first time.

We found:

- Although DCP maintains a database that lists enforcement and non-enforcement activities, it could not, in aggregate, identify the reason for initiating an investigation; the steps taken during the investigation; the length of time; or the outcome.

- Aside from the department's recent effort to confirm that all controlled substance registrants are also registered with CPMRS as required by law, it only enforces violations of CPMRS mandates in response to complaints (such as an inappropriate lookup of an individual who is not an active patient).

- While drug control agents stated that CPMRS information is an extremely helpful in investigations, DCP could not quantify how often CPMRS information was used during the course of investigations.

Although individual enforcement case files provide information about each internal controlled substance abuse or diversion investigation, the DCP information system is not able to report accurate, aggregated enforcement activities. DCP made numerous attempts to obtain and interpret enforcement data for us, but it became evident that the DCP tracking system was not refined enough to answer basic questions about its drug enforcement efforts.

Effect: The inability to track, quantify, and report on the type, volume, and outcomes of all enforcement efforts, and the use of CPMRS information, prevents prescription monitoring program managers and policymakers from understanding how well CPMRS is integrated into enforcement activities, how CPMRS could be improved to better assist in investigations, and the overall success of enforcement efforts.

Cause: DCP management has not made the development of a tracking and reporting system a priority.

Recommendation: The Department of Consumer Protection should develop an information system that accurately quantifies, tracks, and reports on all of its internal drug control enforcement actions and outcomes. The department should document the use of the Connecticut Prescription Monitoring and Reporting System in investigations. **(See Recommendation 13.)**

Agency Response: "We disagree with this recommendation because it suggests that DCP does not currently track its enforcement efforts. The Department has a system that can quantify, track and report Drug Control Enforcement actions. We have and use the e-license system purchased under the state contract and have worked, and will continue to work, to enhance the report functions that it can provide."

Auditors' Concluding Comments: The department was not able to aggregate any enforcement information involving CPMRS violations or use without significant manual retrieval and refinement of the data. This could not be accomplished during the audited period. The current system does not promptly and reliably report the number, types, or outcomes of completed investigations.

Recommendation: The Department of Consumer Protection should develop an enforcement strategy to ensure compliance with Prescription Monitoring Program mandates. This strategy should document how to detect noncompliance with various Connecticut Prescription Monitoring and Reporting System mandates, and which graduated enforcement options to employ to encourage compliance. **(See Recommendation 14.)**

Agency Response: "We disagree with this recommendation because it suggests that DCP does not have an enforcement strategy. Until recently, the CPMRS was a voluntary system that DCP was only able to support through the use of grant funds. Over the past few years, there has been broader recognition of the importance of this system and statutory mandates on its use have been imposed on the prescribing and dispensing community, often at the suggestion of DCP and in accordance with our strategic goals for the program. DCP, however, was not provided resources to aggressively enforce these new mandates. Nonetheless, the Department commenced enforcement related activities from the inceptions of the newly mandated CPMRS system requirements. The first step in this enforcement strategy, which began in 2017, has been to identify and target practitioners that have a Controlled Substance Registration but are not registered in the CPMRS. In addition to these proactive efforts, the Department has been and continues to investigate issues related to CPMRS compliance during complaint-based investigations. Enforcement efforts are highly resource intensive given the nearly thirty thousand registered prescribers in the system and the need to have a hearing before action can be taken against a credential. If a more aggressive enforcement strategy is recommended, more resources would be required or DCP would have to reduce its enforcement of other areas of the controlled substance laws."

Auditors' Concluding Comments: While the department described to us one enforcement effort that began in 2017 to address the registration issues, it did not provide us with a formal, written enforcement strategy that would include how it would detect noncompliance with various Connecticut Prescription Monitoring and Reporting System mandates, and which graduated enforcement options it would employ to encourage prompt and consistent compliance.

Finding 6: Some Department of Consumer Protection's Prescription Monitoring Program management practices are insufficient.

Criteria: Prudent management practices require that organizations develop strategic plans, associated goals, and performance measures as well as create appropriate operating procedures. Strategic planning encompasses a number of activities that include an organizational self-assessment, strategy development, goal setting, and performance monitoring.

Procedures assist an organization in achieving its goals and objectives. Standard operating procedures detail regular recurring work processes that an organization conducts or follows. The procedures should convey information clearly and explicitly to clarify requirements.

Contract management includes not only negotiating the terms and conditions in contracts, but also ensuring compliance with the terms and conditions to ensure they are met.

Condition: During the course of our review, we noted a number of management practices that need improvement:

No formal strategic planning – The Prescription Monitoring Program has no formal strategic plan with quantifiable goals and objectives to help guide its activities and measure its performance. The Department of Consumer Protection posts limited program activity information on its website and Connecticut's Open Data website. DCP recently created a draft annual report containing some activity measures that was scheduled to be published in the spring of 2020. In addition, certain federal grants contain a few limited goals and are only reported to the federal government for grant purposes.

Performance and outcome measures. As noted above, CPMRS lacks a strategic planning process. The adjunct to that is developing and reporting on formal performance and outcome measures. DCP has various program utilization measures of the system available, such as the number of:

- Registered users
- Practitioners using the system
- Practitioner and law enforcement searches.

In addition, DCP tracks the trend in the number of controlled substances dispensed annually, including breakdowns by drug schedule, prescriber type, and most frequently prescribed drugs. Although this is valuable information, there are additional ways to measure performance to improve program operations. The goal would be to develop viable outcomes related to CPMRS using practical measures. For example, DCP should:

- Set a goal to better track the number of CPMRS registered users to the number of controlled substance registrants to ensure those required to access CPMRS are registered. This would help program managers better understand the number of practitioners who did not register with CPMRS, and are not in compliance with the law. DCP could then follow up with these prescribers to educate them about the mandated requirements. DCP needs to accurately measure the number of registered CPMRS users versus the number of actual users.
- Quantify the number of training sessions it offers educating practitioners about the legal requirements surrounding CPMRS usage, the number of healthcare professionals trained, and other essential program functions.
- Quantify the impact of how CPMRS information assisted investigations and enforcement actions.
- Develop plausible outcome measures, such as those related to improved patient care and treatment by reducing reliance on opioids and incidences of doctor shopping.

Inadequate procedures manual – The program has few formal standard policies and procedures to guide Prescription Monitoring Program staff in their daily activities. There are various user guides and procedures for the Connecticut Prescription Monitoring and Reporting System, in addition to recently developed manuals for veterinarians and dispensers. One important omission is a procedure for evaluating public and private research requests for CPMRS information. The department reports that it receives about 10 such requests per year. Currently, management staff review these requests on an ad hoc, case-by-case

basis. There are no written criteria for judging these requests or processes to ensure consistent assessments.

Limited contract management – Appriss is the CPMRS database vendor. We observed that DCP performs limited management oversight of Appriss. The Appriss contract includes only two performance measures. They are "uptime" availability of the system (or percentage of time the system is operational), and the time it takes Appriss to acknowledge (not resolve) a reported system issue based on a priority ranking from 1 (top priority) to 4 (lowest priority).

Contract oversight issues include:

- DCP has not requested routine reports from Appriss to demonstrate that the company is meeting these two measures. Although DCP does not monitor the uptime availability, we found that it appears to meet the 99.5% measure.

- Appriss does not directly measure response time. There is a one to 24-hour required response time standard in the contract, depending on the assigned priority level. According to Appriss, most responses only take seconds, because an automatic email response is generated, acknowledging the need for them to respond. If so, it is unclear what the utility of this measure is and why the upper limit would be 24 hours.

- While the contract with DCP does not require Appriss to report how long it takes to resolve technical issues, Appriss tracks its performance, but does not report it to DCP. For calendar year 2018, we found that Appriss took an average of 1.5 days to resolve priority 1 issues (e.g., unable to connect to the system) and an average of 16 days to resolve priority 4 issues (e.g., incorrect patient data, alert errors). Eight of the 403 issues (2%) took more than 30 days to address, with one taking over 400 days.

- Appriss also measures average speed of answering calls and call abandonment rates though it does not report them to DCP. For calendar year 2018, we found that the average speed of answering calls ranged from about 14 seconds to over 77 seconds. The call abandonment rate ranged from 0% to about 24%.

Effect: Failure to adequately plan reduces an organization's effectiveness and can lead to wasted resources, as some workers may duplicate work and not perform essential tasks. Appropriate performance measures help to ensure that program goals are measured and demonstrate progress

toward attainment. Outcome measures can track how effective a program is in achieving its intended goals.

Standardized procedures help to ensure a mutual understanding between staff and management about operations and responsibilities. Contract monitoring maximizes financial and operational performance and minimizes risks by ensuring that state resources are used appropriately.

Cause: DCP management has not prioritized addressing these planning and administrative concerns. The department cited the lack of administrative capacity. In addition, DCP noted that it has relied on the Department of Administrative Services to provide guidance in the Appriss contract procurement and the expertise to ensure that appropriate contract monitoring measures are in place.

Recommendation: The Department of Consumer Protection should develop a strategic plan for the Connecticut Prescription Monitoring and Reporting System with measureable goals and objectives. The plan should include appropriate performance and outcome measures related to those goals. **(See Recommendation 15.)**

Agency Response: "We disagree with this recommendation. The Department has articulated a strategic plan for the PMP as a result of requirements placed on it by grants. This Department has not been provided resources dedicated to this program in any significant way to develop a plan separate and apart from the strategic plans required by the grants we receive. As a result, the goals, objectives and outcome measures align with the grant requirements, which come with requirements on reporting. We have responsibilities that require standardized national reporting, and we have grants with the Department of Public Health (DPH) and the Department of Mental Health and Addiction Services (DMHAS) that have specific grant requirements that dictate the activities performed by the Department. Additionally, we have been working to achieve greater compliance and usage of the PMP by our enforcement and outreach related activities which include outreach and training by DPH and DMHAS."

Auditors' Concluding Comments: There are historic and current planning documents required by federal agencies to track various facets of work that the department is expected to complete under federal grants. These fragmented efforts fall short of a strategic plan. Strategic planning is a more comprehensive and systematic management tool to help organizations assess the current environment, anticipate and respond to changes in the environment, increase effectiveness, develop commitment to the program's mission, and achieve consensus on strategies and objectives for achieving that mission.

Recommendation: The Department of Consumer Protection should expand the Prescription Monitoring Program procedures manual to include a procedure for evaluating public and private research requests for Connecticut Prescription Monitoring and Reporting System information. ***(*See Recommendation 16.)**

Agency Response: "We agree with this recommendation. The Department has commenced a process to review our current manuals and add additional manuals for other identified end user roles. The Department has already created a new manual for veterinarians and pharmacists that should be available soon. Activities like these require staffing resources that we do not have. We did not have a dedicated PMP Program Manager until 2018 and the majority of our staff remains grant funded thereby limiting their ability to work on projects outside of their grant funding. Expanding the procedure manual, like other similar recommendations, would require more staff funded from the general fund."

Recommendation: The Department of Consumer Protection should increase its monitoring of the Appriss contract by regularly requesting access to the company's contract performance measure reports and any other information that would provide a better understating of how well the company is delivering services. **(See Recommendation 17.)**

Agency Response: "We agree with this recommendation, but are limited in our ability to enact it unilaterally. The contract was negotiated in conjunction with the Department of Administrative Services (DAS) and the Bureau of Enterprise System Technology (BEST). The Department will review this contract and discuss the possibility of acquiring the reports suggested. However, the contract may not specifically require them and the vendor may charge for any modification to the existing software."

Finding 7: The Department of Consumer Protection's analysis of Connecticut Prescription Monitoring Reporting System data is limited.

Criteria: A recognized best practice of prescription monitoring programs is the use of "unsolicited reports" or "alerts" that CPMRS automatically generates to notify providers about patients who may be at risk of drug misuse or abuse when the practitioner logs onto the system. Examples of risk criteria include multiple provider visits who prescribe controlled substances, combinations of commonly misused drugs (e.g., opioids and benzodiazepines), and exceeding a threshold for an average daily dose of an opioid in morphine milligram equivalents (e.g., more than 90

MME). [11] These alerts serve as a tool to mitigate dangerous prescription drug interactions and possible abuse. "Solicited reports" are prescription history reports provided to users upon request.

If the prescription monitoring system only relied on reports specifically requested by users, critical patient information could go unnoticed. Several federal grant programs aimed at developing and enhancing prescription monitoring programs either require or encourage the use of unsolicited reports. Some of these reports require considerable analysis of the prescription monitoring data set. For example, the Substance Abuse and Mental Health Services Administration (SAMSA) noted that analysis of PMP data can reveal:

- Prescribing rates that may be consistently higher or lower for different types of controlled substances (e.g., opioids, benzodiazepines, stimulants)

- Providers prescribing and pharmacies dispensing controlled substances in excessive quantities

- Individuals who are prescribed dangerous combinations of drugs (e.g., concurrent prescriptions for opioids and benzodiazepines)

- Individuals who may be addicted and receiving multiple prescriptions for commonly misused drugs from multiple prescribers and/or pharmacies—also known as multiple provider episodes (MPEs) or doctor/pharmacy shopping

- Geographic locations of patients who are receiving dangerous combinations of drugs and/or are engaged in doctor/pharmacy shopping.

Furthermore, the federal Centers for Disease Control and Prevention believe that PMP should not be passive databases. In its view, the programs should be actively managed as public health tools and support providing unsolicited reports on "high-risk providers and patients to the appropriate providers, regulatory boards, as well as law enforcement agencies under certain circumstances, such as an active investigation, court order, or subpoena."

[11] Milligram Morphine Equivalent (MME) is a value assigned to opioids to represent their relative potencies. MME is determined by using an equivalency factor to calculate a dose of morphine that is equivalent to the ordered opioid. Daily MED is the sum of the MME of all opioids a patient is likely to take within 24 hours, and that total is used to determine whether the patient is nearing a potentially dangerous threshold.

Condition:

The Department of Consumer Protection does utilize unsolicited reports or alerts to a significant extent. Additional analysis of the Connecticut Prescription Monitoring and Reporting System data could better identify patterns of possible misuse of controlled substances. CPMRS generates alerts that are available to prescribers when a patient's prescription report meets certain types of concern criteria. Prescribers are also provided access to prescriber report cards every 6 months utilizing CPMRS data that provide a practitioner with a snapshot of their controlled substance prescribing patterns. Finally, prescribers also have access to the recently implemented NarxCare report. This report is another type of analytic tool that aggregates and analyzes prescription information from providers and pharmacies and develops information such as risk scores to help prescribers provide for better patient safety and outcomes. However, DCP does analyze these reports and alerts, and they are not generally available to law enforcement or regulatory agencies.

Although these various reports and alerts can be helpful to the prescriber, the current monitoring system is missing an active DCP analysis of the CPMRS database to identify potential patterns of abuse or nonmedical use of controlled substances along with unsolicited reporting (i.e. referral) to DPH practitioner investigators, DSS Medicaid fraud investigators, and law enforcement when appropriate.

Law enforcement agencies, DPH investigators, and the Department of Social Services (DSS) fraud investigators in Connecticut can request limited access to CPMRS. They are allowed to view an individual patient's or prescriber's controlled substance prescription history based on an active case that is usually based on a complaint reported to DPH or the law enforcement agency. Access to CPMRS by these users is restricted to specific cases. DCP only refers suspicious cases to a DPH investigator or law enforcement as a result of one of its case specific investigations, usually as a result of a complaint to DCP. Currently, there is no overall standard screening tool and associated analysis to detect possible inappropriate prescribing and dispensing beyond the general alerts described above. In addition, there is limited Department of Social Services case-by-case CPMRS access to monitor Medicaid recipients. The Department of Consumer Protection has the sole authority to analyze the entire dataset to detect possible inappropriate or dangerous use of controlled substances.

A number of states require routine monitoring of their controlled substance databases and require or permit their prescription monitoring programs to refer serious cases of questionable activity to licensing boards or law enforcement. Kentucky's KASPER system provides unsolicited reporting on prescribers in coordination with its Office of

the Inspector General (OIG). Reporting is based on criteria developed by an advisory council composed of representatives from Kentucky licensing boards, professional associations, law enforcement, and other stakeholders. OIG investigators review prescription history reports on the top prescribers of the most commonly abused and diverted prescription drugs. If the reviews indicates a substantial likelihood of suspicious prescribing, the information is forwarded to the appropriate licensing board. In the first 4 years of operation, 80 licensing board investigations of prescribers were initiated based on these referrals.

In North Carolina, a collaborative between the Department of Health and Human Services, the North Carolina Medical Board, and the University of North Carolina Injury Prevention Center developed a series of measures designed to help practitioners with prescribing patterns that suggest possible inappropriate practices. Measures were validated by examining prescription data on practitioners who prescribed opioids to patients who subsequently died from opioid overdoses within 30 days of the of the providers' prescriptions. The North Carolina Medical Board, with the assistance of an internal advisory committee, uses selected measures as objective criteria to identify practitioners for investigations into problematic prescribing.

Texas uses automated algorithms to conduct frequent analysis of its database to detect possible problematic prescribing, dispensing, and doctor shopping. Prescription data is reviewed to rule out legitimate reasons for what appears to be diversionary prescribing or dispensing. The Texas prescription monitoring program refers an average of 20-25 cases per month for law enforcement investigation.

Effect: Additional analysis and reporting of CPMRS data to appropriate health, legal, and regulatory bodies could provide new opportunities to identify unsafe prescribing and dispensing practices as well as enhance clinical care and patient safety.

Cause: There are a number of challenges to expanding the use of CPMRS data to detect inappropriate prescribing and dispensing that makes this change difficult for DCP management to implement. These include:

- Lack of clarity as to which indicators may serve as a good screening tool.
- Concerns about the potential for many false positives.
- Resource limitations to investigate providers identified by these screens.

- Lack of or limited information concerning practitioner specialty (e.g., oncologists, end-of-life treatment specialists) to appropriately identify problematic prescribing practices.

- Concerns about unintended consequences, such as practitioners who treat chronic patients may dismiss them prematurely, treat them sub-optimally by under-prescribing needed pain relievers, and decline to accept these patients into their practices.

Best practice guidance emphasizes the importance of a collaborative approach with stakeholders to ensure that criteria is developed that only indicates cases meriting closer attention and starting with conservative thresholds for detecting inappropriate prescribing among patients, prescribers, and dispensers. Depending on the purpose of the analysis, DCP may need to collect additional data. It is also important to consider that CPMRS data is not conclusive of inappropriate behavior, but just a starting point to determine whether a more in-depth investigation should be initiated.

Recommendation: The Department of Consumer Protection should analyze the feasibility and benefits of developing enhanced data analytic capabilities to regularly and actively detect questionable prescribing and dispensing activities that may be suitable for additional in-depth investigation and possible referral to appropriate authorities and the Department of Public Health. This assessment should describe how the department would consult with practitioner groups and law enforcement agencies to determine the types and level of activity suitable for investigation; choose criteria and thresholds for inappropriate use and questionable prescription activity; periodically review thresholds to reduce the possibility of false positives; educate and train recipients of reports to understand the limitations of prescription history data; utilize the data as an additional opportunity to connect potential substance abusers to treatment; and facilitate cross-agency communications to ensure that cases of possible aberrant prescribing and dispensing are referred to the appropriate agencies. DCP should provide this feasibility report to the committee of cognizance of matters relating to the Department of Consumer Protection within one year from the publication of this audit. **(See Recommendation 18.)**

Agency Response: "The Department agrees with this recommendation. We are proud of the data analysis that we have done thus far and interested in enhancing that for the future. We have published our data on our website as frequently as by quarter to improve the value to our various stakeholders. The Department is also involved in a number of grants with other agencies and we provide various amounts of data to them. In the last year, the Department purchased SAS software to enhance our ability to review

data and leverage analytical tools supported by the Center for Disease Control and Prevention. We have also been exploring the possibility of purchase the analytic package offered by our software vendor or other software options such as Tableau."

Finding 8: Pharmacists are not required to look up patient prescription history.

Criteria: Prescription monitoring programs are an effective tool for addressing the misuse, abuse, and diversion of controlled substances. Legislation has focused on mandating that prescribers query their state's CPMRS prior to prescribing a controlled substance and at regular intervals before renewal. As of 2019, 19 states have adopted requirements that pharmacists also query their states' CPMRS data system under certain circumstances. Brandeis University, through its Prescription Drug Monitoring Program Training and Technical Assistance Center lists mandating pharmacist use of CPMRS as a best practice. Pharmacists can further aid in reducing drug misuse or abuse since they have final responsibility for dispensing controlled substances to patients. This would provide for an additional review of a patient's controlled substance history.

Condition: Connecticut mandates that dispensers upload controlled substance data to CPMRS, but pharmacists have discretion whether to actually research a patient's history in it. Beginning October 1, 2019, pharmacists may delegate a pharmacy technician to look up a patient's controlled substance history. This statutory change created an opportunity for pharmacies to be more proactive prior to dispensing a controlled substance.

In our interviews with members of the Connecticut Commission of Pharmacy, they stated that many pharmacists conduct lookups and take action accordingly if they suspect abuse or diversion.

DCP provided data showing that 1,855 pharmacists searched CPMRS accounting for 634,497 patient lookups in 2018. Thus, many pharmacists are already accessing CPMRS.

Effect: The lack of a patient lookup mandate for pharmacists increases the risk that they could dispense a controlled substance to a person who is misusing, abusing, or selling the drug for profit. The larger pharmacy chains already have internal policies that require pharmacists to conduct a patient lookup under certain circumstances prior to dispensing controlled substances. Mandating all pharmacies to implement this action under certain circumstances could reduce drug abuse or diversion. In addition, pharmacists would automatically receive any alerts generated for an individual prior to dispensing a Schedule II

controlled substance, which would add an additional layer of protection against misuse.

Cause: Connecticut law does not mandate that pharmacists research patient history in CPMRS. It leaves it to the discretion of the pharmacist or pharmacy policies.

Recommendation: The Department of Consumer protection should seek to amend Section 21a-254 of the General Statutes to require pharmacists (or their delegates) to query the Connecticut Prescription Monitoring and Reporting System when dispensing a Schedule II controlled substance. They should also query the system if the pharmacist reasonably believes that a patient may be seeking to fill a controlled substance prescription for any purpose other than the treatment of an existing medical condition. If there is suspected abuse or misuse of a medication based on the lookup in the system, the pharmacist should confer with the prescriber to verify the prescription is medically necessary or use their professional judgement to take other actions to insure patient safety. **(See Recommendation 19.)**

Agency Response: "We do not oppose this idea and agree that it would require that the legislature change the statutes. This would also require additional resources to enforce."

Finding 9: The Department of Consumer Protection needs to improve the Connecticut Prescription Monitoring and Reporting System.

Criteria: Good business practices suggest that all Connecticut Prescription Monitoring and Reporting System users should be aware of its features and that DCP program managers should obtain and consider user feedback to ensure that the system is working satisfactorily and determine whether improvements are needed.

In addition, the prescription information in the CPMRS database should be as comprehensive as possible to give prescribers the most complete picture of the patient's controlled substance record. For example, pharmacies dispensing controlled substances to patients residing in nursing homes are exempt from reporting those drugs to CPMRS.

Condition: During the course of this audit, we noted the following improvements could be made to CPMRS that would enhance its utility and ease of use. This includes:

Better training on Connecticut Prescription Monitoring and Reporting System features needed. We found that practitioners are not always aware of certain CPMRS features. For example:

- Prescriber reports cards provide a summary of a healthcare provider's prescribing history, including how they compare in the number of patients they prescribe opioids to and the number of opioid prescriptions on average per month compared to similar prescribers and other prescribers within their specialty. In our survey, we found that 20% of prescribers who responded were not aware of the report card.

- CPMRS allows prescribers to check other states for a patient's controlled substance prescription history. Twenty-four percent of survey respondents were not aware of this capability.

- CPMRS allows prescribers (and recently, dispensers) the ability to appoint a delegate to access and check the database on their behalf. A number of practitioners told us that they were unsure how to deactivate a delegate from CPMRS access if they no longer perform a particular function in a practitioner's office or leaves employment. If the system does not promptly remove unauthorized delegates access rights, inappropriate CPMRS access may occur.

- The survey showed that 1 out of 5 respondents would like additional training on how to use CPMRS.

No formal feedback from users. The Department of Consumer Protection does not solicit any official feedback or survey CPMRS users about their satisfaction with the system. Collecting user opinions demonstrates that their input is valuable to PMP and can create stronger bonds with them. A number of our interviewees suggested that users would like to provide input into the operation of the program and suggestions for improvement.

Nursing home prescription data should be included. Currently, pharmacies that provide controlled substances to individuals residing in nursing homes are exempt from uploading this data to CPMRS. A number of practitioners we interviewed (as well as 70% of prescribers who responded to our survey and believed such reporting was applicable to their practice) thought this information should be included in CPMRS.

This type of reporting would give healthcare practitioners a more comprehensive picture of this segment of their patient population. Even though patients may be residing in nursing homes or other long-term care settings, it does not mean all their medical care is delivered in these settings, as they often require treatment from physicians in the community. Many individuals residing in nursing homes have multiple

emergency room visits, and although health information should accompany the patient to the hospital, this may not always happen.

Effect: If users are not aware of all the CPMRS features, the system will be less useful to them, and they will not use it as often or use it inefficiently. User feedback can help program managers respond to any current or developing problems and help them plan for improvements.

Because controlled substance drugs received by nursing home residents are not uploaded into CPMRS, community doctors and emergency room physicians may not obtain the patient's full prescription drug history. This could compromise patient care. A complete controlled substance prescription record can better assist prescribers in their active treatment of their patients.

Cause: DCP management is responsible for improvements to CPMRS. The lack of a formal strategic planning process may contribute to a more reactive rather than proactive approach to user feedback and associated improvements.

In addition, state law exempts pharmacies that dispense controlled substances to nursing home patients from uploading the information to CPMRS.

Recommendation: The Department of Consumer Protection should regularly obtain Connecticut Prescription Monitoring and Reporting System user satisfaction feedback to determine areas in which users would like additional knowledge or skills. This would improve the department's focus on specific trainings areas. **(See Recommendation 20.)**

Agency Response: "We agree that regular feedback from users regarding the CPMRS is helpful and valuable. The Department regularly receives feedback through industry groups (medical societies, veterinary societies, pharmacy associations, and nursing associations etc.), during presentations, via phone, email and other state relationships. This feedback has assisted us in making changes to the software or processes where feasible. DCP will consider whether it would add value to receive additional feedback using different methods, such as the creation of a survey for all users. The resources required to review that level of data, however, may be prohibitive within the constraints of the current funding of the program."

Recommendation: The Connecticut General Assembly should amend Section 21a-254 (j)(1) of the General Statutes to mandate that pharmacies dispensing controlled substances to nursing home patients upload prescription

information to the Connecticut Prescription Monitoring and Reporting System. **(See Recommendation 21.)**

Agency Response: "We agree that including prescription information for patients in a nursing home is valuable and could be included in the CPMRS, however we are concerned that the expansion may cause an increase in cost to the current contract and we want to make sure that the additional data does not result in performance degradation. Additionally, having another required registrant upload will increase the enforcement required. The increased enforcement by the Division would require additional staff."

RECOMMENDATIONS

This is our first audit of Connecticut's Prescription Monitoring Program, and there are no prior audit recommendations to address. Our current audit resulted in 21 recommendations:

1. The Department of Consumer Protection should seek to amend Section 21a-319 of the General Statutes to allow it to deactivate the controlled substance registration for anyone no longer licensed by the Department of Public Health. If DPH reinstates a practitioner's license, the Department of Consumer Protection should reactivate the practitioner's controlled substance registration at no charge if the registration period has not expired.

2. The Department of Consumer Protection should ensure all that practitioners with active licenses issued by the Department of Public Health register with the Connecticut Prescription Monitoring and Reporting System. The department should continue any related enforcement actions and validate that practitioners are registered with CPMRS when they renew their controlled substance registration.

3. The Department of Consumer Protection should develop a system to ensure practitioners are meeting lookup requirements or consider incorporating the refined Appriss Mandatory Use Compliance Module so it can improve its monitoring of practitioner compliance with the law. The department should initially focus on healthcare practitioners who prescribed large amounts of Schedule II controlled substances, but have never conducted a patient lookup on the Connecticut Prescription Monitoring and Reporting System. The department also should educate them about the requirements of the law.

4. The Department of Consumer Protection should develop a process to identify dispensers who fail to upload controlled substance prescription data to the Connecticut Prescription Monitoring and Reporting System. The department should monitor dispensers who fail to report any prescriptions on a given day to ensure they comply with the law or be subject to sanctions.

5. The Department of Consumer Protection should develop a process to identify and notify delinquent dispensers that they are legally required to upload daily any controlled substances dispensed or a zero report if they did not dispense any. The department should penalize dispensers who are continually delinquent.

6. The Department of Consumer Protection should require individuals who no longer dispense prescription drugs to formally notify the department.

7. The Department of Consumer Protection controlled substance registration application should clarify the difference between prescribing only or prescribing and dispensing to ensure that non-dispensing prescribers do not identify as dispensers. The application should contain prescriber-only and prescriber/dispenser designations. The department should charge a separate registration fee for prescriber/dispensers.

8. As part of its pharmacy inspection process, the Department of Consumer Protection should measure the accuracy of the Connecticut Prescription Monitoring and Reporting System by reviewing a sample of dispensed controlled substance prescriptions and comparing it to the system data to ensure it includes all required prescriptions.

9. The Department of Consumer Protection should perform random inspections of a portion of non-pharmacy dispensers.

10. The Department of Consumer Protection should amend its contract to require Appriss to provide routine error reports.

11. The Department of Consumer Protection should remind all dispensers of the requirement to upload accurate controlled substance data. The department should educate dispensers on how to avoid common errors that prevent data from uploading into the Connecticut Prescription Monitoring and Reporting System. In addition, the department should inform dispensers that failure to correct serious errors within 14 business days or consistently uploading data with errors, may subject them to sanction or referral to the appropriate regulatory board or commission for further consideration.

12. As part of its pharmacy inspection process, the Department of Consumer Protection should generate a random sample of prescriptions listed in the Connecticut Prescription Monitoring and Reporting System and compare it to the actual prescriptions at the pharmacy being inspected to ensure information is complete and has been accurately uploaded.

13. The Department of Consumer Protection should develop an information system that accurately quantifies, tracks, and reports on all of its internal drug control enforcement actions and outcomes. The department should document the use of the Connecticut Prescription Monitoring and Reporting System in investigations.

14. The Department of Consumer Protection should develop an enforcement strategy to ensure compliance with Prescription Monitoring Program mandates. This strategy should document how to detect noncompliance with various Connecticut Prescription Monitoring and Reporting System mandates, and which graduated enforcement options to employ to encourage compliance.

15. The Department of Consumer Protection should develop a strategic plan for the Connecticut Prescription Monitoring and Reporting System with measureable goals and objectives. The plan should include appropriate performance and outcome measures related to those goals.

16. The Department of Consumer Protection should expand the Prescription Monitoring Program procedures manual to include a procedure for evaluating public and private research requests for Connecticut Prescription Monitoring and Reporting System information.

17. The Department of Consumer Protection should increase its monitoring of the Appriss contract by regularly requesting access to the company's contract performance measure reports and any other information that would provide a better understating of how well the company is delivering services.

18. The Department of Consumer Protection should analyze the feasibility and benefits of developing enhanced data analytic capabilities to regularly and actively detect questionable prescribing and dispensing activities that may be suitable for additional in-depth investigation and possible referral to appropriate authorities and the Department of Public Health. This assessment should describe how the department would consult with practitioner groups and law enforcement agencies to determine the types and level of activity suitable for investigation; choose criteria and thresholds for inappropriate use and questionable prescription activity; periodically review thresholds to reduce the possibility of false positives; educate and train recipients of reports to understand the limitations of prescription history data; utilize the data as an additional opportunity to connect potential substance abusers to treatment; and facilitate cross-agency communications to ensure that cases of possible aberrant prescribing and dispensing are referred to the appropriate agencies. DCP should provide this feasibility report to the committee of cognizance of matters relating to the Department of Consumer Protection within one year from the publication of this audit.

19. The Department of Consumer protection should seek to amend Section 21a-254 of the General Statutes to require pharmacists (or their delegates) to query the Connecticut Prescription Monitoring and Reporting System when dispensing a Schedule II controlled substance. They should also query the system if the pharmacist reasonably believes that a patient may be seeking to fill a controlled substance prescription for any purpose other than the treatment of an existing medical condition. If there is suspected abuse or misuse of a medication based on the lookup in the system, the pharmacist should confer with the prescriber to verify the prescription is medically necessary or use their professional judgement to take other actions to insure patient safety.

20. The Department of Consumer Protection should regularly obtain Connecticut Prescription Monitoring and Reporting System user satisfaction feedback to determine areas in which users would like additional knowledge or skills. This would improve the department's focus on specific trainings areas.

21. The Connecticut General Assembly should amend Section 21a-254 (j)(1) of the General Statutes to mandate that pharmacies dispensing controlled substances to nursing home patients upload prescription information to the Connecticut Prescription Monitoring and Reporting System.

CONCLUSION

In conclusion, we wish to express our appreciation for the courtesies and cooperation extended to our representatives by the personnel of the Department of Consumer Protection during the course of our examination

Scott Simoneau
Principal Auditor

Maryellen Duffy
Associate Auditor

Approved:

John C. Geragosian
State Auditor

Robert J. Kane
State Auditor

APPENDIX A: CONNECTICUT LEGISLATIVE HISTORY OF THE PRESCRIPTION MONITORING PROGRAM

PA 06-155: Enabling legislation that established the Prescription Monitoring Program (PMP) (codified in Sec. 21a-254 of the General Statutes). The law required the Department of Consumer Protection commissioner, within available appropriations, to create the program to collect prescription information from pharmacies about Schedule II, III, IV, and V controlled substances. Pharmacies were required to report specific individual-level information to DCP on each controlled substance prescription dispensed every two weeks, either electronically or in a format approved by the commissioner. The act exempted reporting requirements for institutional or long-term care patients, including those in assisted living facilities or hospitals. Health practitioners and pharmacies could only access the data if they submitted a written request for specific patient information to DCP and obtained the department's approval. The act also created a prescription drug monitoring working group to advise the commissioners on program implementation on effective use of the data to detect the abuse or misuse of these drugs. In addition, the act requires a pharmacist or designated agent to require the presentation of valid photographic identification before releasing a controlled substance to anyone unknown. The commissioner is required to adopt regulations about reporting, evaluating, managing, and storing electronic controlled substance prescription data.

PA 13-172: Required all practitioners who hold a controlled substance registration to register for access with the Connecticut Prescription Monitoring and Reporting System (CPMRS). The act also increased the requirement that pharmacies electronically upload (or in a format approved by the commissioner) controlled substance prescriptions dispensed from twice a month to once a week, and expanded reporting requirements to (2) nonresident pharmacies (i.e., out-of-state pharmacies that send prescription drugs into the state); (3) outpatient pharmacies in hospitals or institutions; and (4) practitioners who dispense controlled substances.

PA 15-198: Required practitioners (or prescriber delegates who must be licensed health care professionals: 1) to check the patients record in Connecticut Prescription Monitoring and Reporting System before prescribing more than a 72-hour supply of a controlled substance, and 2) to review the patient's record at least every 90 days if prescribing for prolonged treatment. Other provisions of the act not directly related to the Prescription Monitoring Program mandated certain practitioners receive continuing education in pain management and prescribing controlled substances to be eligible for license renewal, while other sections related to opioid agonists exempted them from PMP reporting requirements in certain situations.

PA 15-5, June Special Session: Starting July 1, 2016, the act required pharmacies to report data to the Prescription Monitoring Program immediately after dispensing controlled substances, but in no event wait more than 24 hours after doing so, except if the program is "down." Starting on that date, the act also requires that the information be submitted electronically in a DCP-approved format, eliminating the option of other DCP-approved methods of reporting by pharmacies or outpatient pharmacies that do not maintain electronic records.

PA 16-43: Provisions related to the Prescription Monitoring Program continue to restrict dispensing of controlled substance prescriptions for opioids by prohibiting prescribers from issuing prescriptions for more than a 7-day supply to a minor or an adult for the first time for outpatient use with some exceptions. The act required practitioners to review PMP within certain timeframes, depending on the type of controlled substance prescribed. Reporting requirements to PMP expanded for dispensers from 24 hours to the end of the following business day (except vets who have longer timeframe). The act eliminated the requirement that an authorized agent be a licensed health care professional. The act also modified reporting deadlines and decreased prescriber reviews for prolonged treatment with Schedule V nonnarcotic drugs. Additionally, the act required the public health committee to convene a working group to determine whether it was a best practice to restrict minor first time supply of opioids to 3 days and report back by February 2017.

PA 17-131: Amended Prescription Monitoring Program provisions to permit the DCP commissioner to share certain PMP information with other state agencies' drug abuse studies. The act restricted a prescriber even further by allowing a prescription to a minor for no more than a 5-day supply of an opioid with certain exceptions.

PA 18-16: Amended the Prescription Monitoring Program section of the statute to require specific individuals and entities manufacturing, distributing, administering, dispensing, or having custody of controlled substances to conduct a controlled substance inventory annually, rather than biennially.

PA 18-100: The act required the public health and consumer protection commissioners to review pharmacists' and prescribing practitioners' compliance rate with the electronic PMP requirements and to submit a joint report with recommendations to the public health and general law committees by January 1, 2019.

PA 19-191: The act allowed pharmacists to designate a pharmacy technician to consult the Connecticut Prescription Monitoring and Reporting System before dispensing controlled substance prescriptions. It generally subjects pharmacy technicians and their supervising pharmacists to the same requirements that apply to prescribing practitioners and their agents (e.g., confidentiality and liability for the agent's database misuse). Under the act, before designating a pharmacy technician to access CPMRS, the supervising pharmacist must train the technician in the process.

APPENDIX B HEALTHCARE PRACTITIONER SURVEY
Responses from Practitioners who Prescribed 1 or More Controlled Subscriptions to a Patient in the Past Month at time of Survey

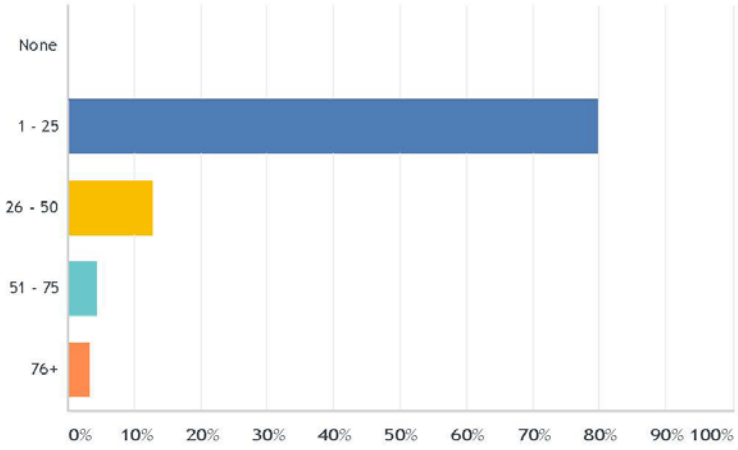
Q1 Do you hold a controlled substance registration issued by the Department of Consumer Protection?

Answered: 3,494 Skipped: 3

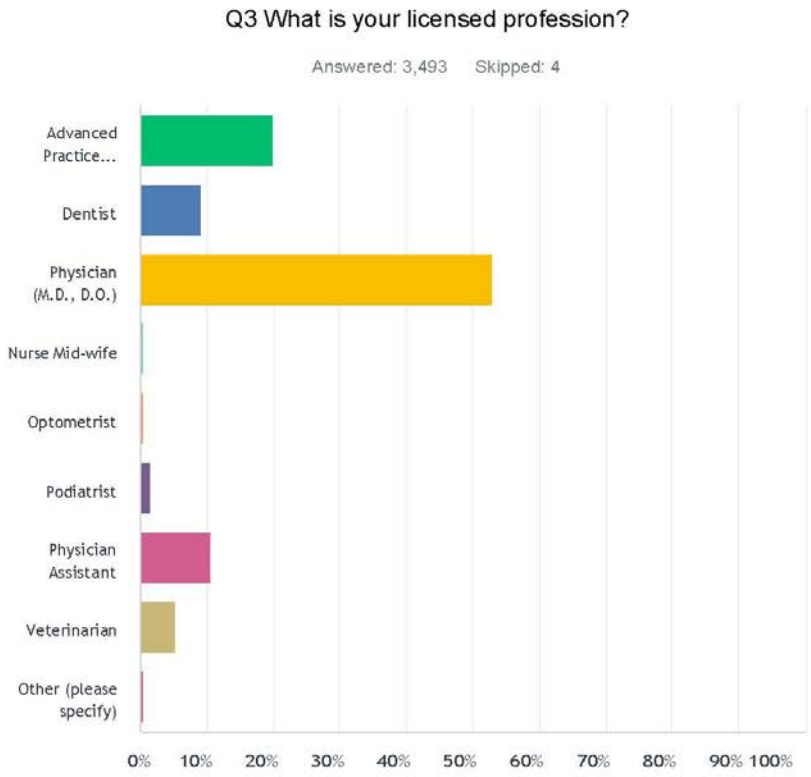
ANSWER CHOICES	RESPONSES	
Yes	100.00%	3,494

Q2 How many prescriptions for controlled substances have you written in the last month?

Answered: 3,497 Skipped: 0



ANSWER CHOICES	RESPONSES	
None	0.00%	0
1 - 25	79.53%	2,781
26 - 50	12.81%	448
51 - 75	4.32%	151
76+	3.35%	117
TOTAL		3,497



ANSWER CHOICES	RESPONSES	
Advanced Practice Registered Nurse (APRN)	19.84%	693
Dentist	8.90%	311
Physician (M.D., D.O.)	52.91%	1,848
Nurse Mid-wife	0.43%	15
Optometrist	0.43%	15
Podiatrist	1.46%	51
Physician Assistant	10.36%	362
Veterinarian	5.21%	182
Other (please specify)	0.46%	16
TOTAL		3,493

Q4 Please enter your specialty or subspecialty, if applicable: (open-ended question)

Answered: 2,980 Skipped: 517

Q5 How easy was it for you to perform the following:

Answered: 3,345 Skipped: 152

	VERY EASY	SOMEWHAT EASY	NEITHER EASY NOR DIFFICULT	SOMEWHAT DIFFICULT	VERY DIFFICULT	NOT APPLICABLE	TOTAL
Register with the CPMRS	25.26% 842	34.38% 1,146	23.91% 797	11.10% 370	2.76% 92	2.58% 86	3,333
Obtain patients' controlled substance Rx report from the CPMRS	30.41% 1,014	30.62% 1,021	18.48% 616	9.00% 300	3.18% 106	8.31% 277	3,334
Register a delegate to act on your behalf and access the CPMRS	6.35% 211	8.87% 295	9.42% 313	4.09% 136	2.59% 86	68.68% 2,283	3,324
Deactivate a delegate from the CPMRS	3.10% 102	4.13% 136	6.47% 213	1.43% 47	1.18% 39	83.70% 2,757	3,294

Q6 How frequently do you or your delegate access the CPMRS?

Answered: 3,325 Skipped: 172

ANSWER CHOICES	RESPONSES	
Daily	17.05%	567
Weekly	24.45%	813
Monthly	14.80%	492
Rarely	20.60%	685
Never	23.10%	768

Q7 What are the reasons that you or your delegate access the CPMRS? (Check all that apply)

Answered: 3,128 Skipped: 369

ANSWER CHOICES	RESPONSES	
Prescribing a controlled substance to a new patient	69.47%	2,173
Prescribing a prescription refill to an existing patient	57.67%	1,804
To access a patients' controlled substance history if I suspect over-use	67.62%	2,115
To ensure patient is not "doctor shopping"	52.81%	1,652
When a patient requests an early refill for a controlled substance	43.70%	1,367
Part of office policy to check when a controlled substance is prescribed for every patient	35.65%	1,115
To monitor a medication taper	9.08%	284
To assist in making clinical decisions	36.13%	1,130
Other (please specify)	7.19%	225

Q8 In your opinion, how accurate is the patient information contained in the CPMRS?

Answered: 3,236 Skipped: 261

	RESPONSES	
Very accurate	46.66%	1,510
Somewhat accurate	29.60%	958
Somewhat inaccurate	2.63%	85
Very inaccurate	1.48%	48
Not sure	19.62%	635

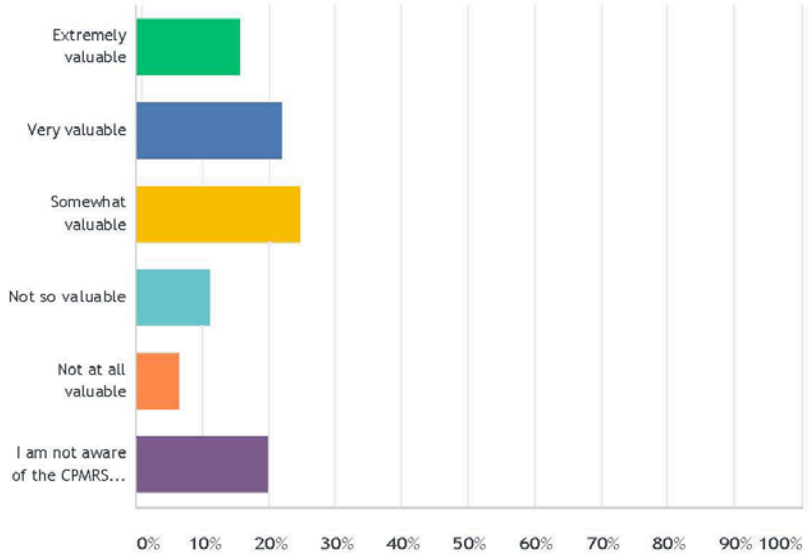
Q9 Which patient alerts generated by the CPMRS have changed your prescribing pattern for a patient? (Check all that apply)

Answered: 3,155 Skipped: 342

ANSWER CHOICES	RESPONSES	
Patient has used 5 prescribers and 5 pharmacies within the last 90 days	43.68%	1,378
Daily MME >90 MME	20.06%	633
Concurrent prescribing of benzodiazepines and opioids	39.75%	1,254
None	42.35%	1,336

Q10 Rate the usefulness of the CPMRS Prescriber Report Card as a tool to assist you in clinical decision-making:[11]

Answered: 3,172 Skipped: 325



ANSWER CHOICES	RESPONSES	
Extremely valuable	15.67%	497
Very valuable	21.97%	697
Somewhat valuable	24.62%	781
Not so valuable	11.00%	349
Not at all valuable	6.53%	207
I am not aware of the CPMRS Prescriber ReportCard	20.02%	635

Q11 How have your controlled substance prescribing practices changed in the last 3 years because you use the CPMRS to look up patients Rx history?

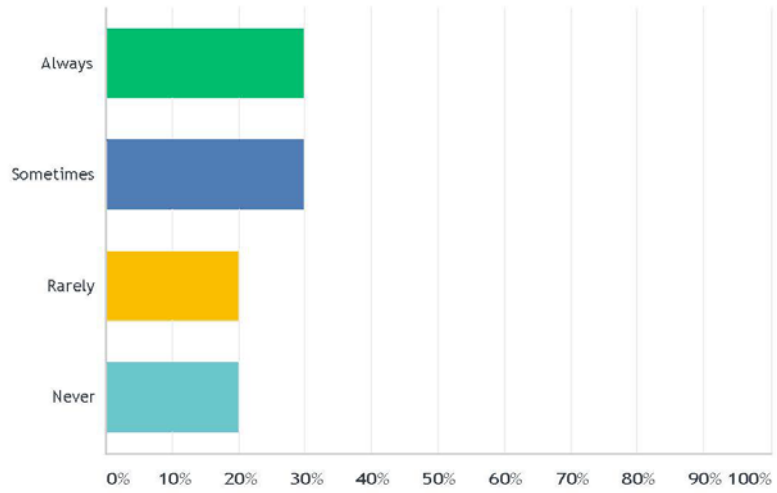
Answered: 3,072 Skipped: 425

ANSWER CHOICES	RESPONSES	
Prescribe fewer controlled substances	43.88%	1,348
No change	55.50%	1,705
Prescribe more controlled substances	0.62%	19

[11] 3,172 responded to this question, but only 3,166 answered the multiple choice question. We had an open-ended comment choice and 6 of those people did not answer the multiple choice question, but just provided a comment.

Q12 Although the law only requires you to access the CPMRS if you write a controlled substance prescription exceeding a 72-hour supply, how often do you access the CPMRS before writing one that is less than 72 hours?

Answered: 3,069 Skipped: 428



ANSWER CHOICES	RESPONSES	
Always	30.11%	924
Sometimes	30.53%	937
Rarely	19.84%	609
Never	19.52%	599
TOTAL		3,069

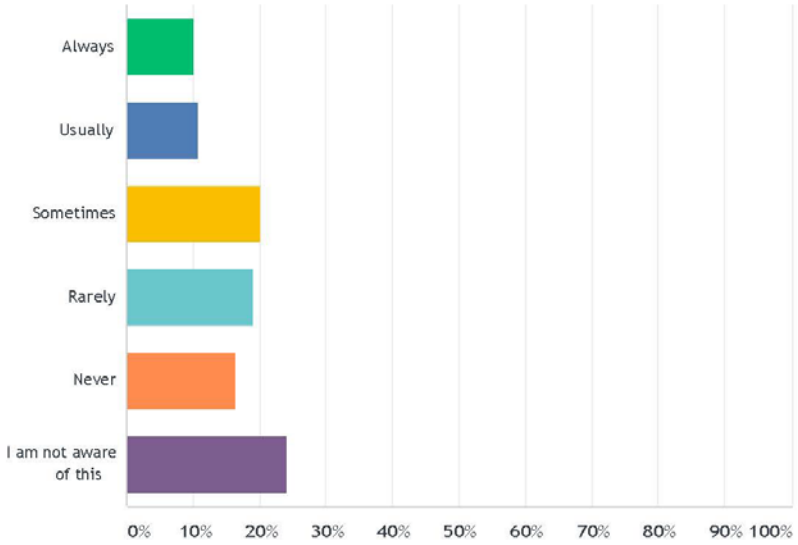
Q13 In the past year, which of the following actions have you taken as a result of looking up a patient on the CPMRS? (Check all that apply)

Answered: 2,777 Skipped: 720

ANSWER CHOICES	RESPONSES	
Spoke with patient about danger of addiction to controlled substances before writing a prescription	49.51%	1,375
Spoke with patient about their controlled substance use	60.14%	1,670
Contacted other providers or pharmacies that patient uses	29.20%	811
Confirmed patient was doctor shopping	21.10%	586
Confirmed patient had legitimate need for controlled substance prescription(s)	45.59%	1,266
Established a patient treatment plan about opioid use	21.50%	597
Reduced or eliminated controlled substance prescription for patient	43.18%	1,199
Referred or recommended patient for substance abuse treatment	18.58%	516
Referred patient to a pain management specialist	31.47%	874
Prescribed naloxone	10.48%	291
Dismissed patient from practice	8.32%	231
Did not accept a person seeking to become a new patient because of CPMRS Rx history	7.78%	216
Other (please specify)	11.20%	311
Total Respondents: 2,777		

Q14 The CPMRS allows prescribers to check other states for the controlled substance prescription history of patients. How often do you use this capability?

Answered: 3,058 Skipped: 439



ANSWER CHOICES	RESPONSES	
Always	9.94%	304
Usually	10.66%	326
Sometimes	20.18%	617
Rarely	19.00%	581
Never	16.25%	497
I am not aware of this capability	23.97%	733

Q15 Do you have any concerns that people with access to the CPMRS could be looking up individuals that are not their patients (i.e., unauthorized look ups)?

Answered: 3,041 Skipped: 456

ANSWER CHOICES	RESPONSES	
Yes	16.08%	489
No	83.92%	2,552
TOTAL		3,041

Q16 If your delegate to the CPMRS leaves your employment, what actions do you take to deactivate the individual? (Check all that apply)

Answered: 3,003 Skipped: 494

ANSWER CHOICES	RESPONSES	
Contact the Department of Consumer Protection	4.63%	139
Change the password so person no longer has access	13.92%	418
I do not delegate access to the CPMRS	78.52%	2,358
Other (please specify)	6.96%	197

Q17 Which of the following is a barrier(s) that keeps you from using the CPMRS more? (Check all that apply)

Answered: 3,009 Skipped: 488

ANSWER CHOICES	RESPONSES	
No barriers	37.45%	1,127
Limitations with internet access at work	8.87%	267
Lack of time	42.67%	1,284
Lack of training on how to access the CPMRS	9.01%	271
Frequent password change	22.33%	672
Do not find information useful	5.58%	168
Other (please specify)	9.60%	289

Q18 Currently, long-term care facilities, such as nursing homes, are exempt from reporting to the CPMRS controlled substances that are dispensed to patients in those settings. Would it be helpful to your practice to mandate this information be included in the CPMRS?

Answered: 3,023 Skipped: 474

ANSWER CHOICES	RESPONSES	
No	17.23%	521
Yes	41.28%	1,248
Not applicable to my practice	41.48%	1,25

Q19 Other features will soon be available in CPMRS, which ones will you likely use? (Check all that apply)

Answered: 3,008 Skipped: 489

ANSWER CHOICES	RESPONSES	
Sending secure peer-to-peer messages about controlled substance use by a specific patient	47.21%	1,420
Reading care notes written by other providers	47.47%	1,428
Integration with your office's electronic health record system	60.34%	1,815
None	17.25%	519
Other (please specify)	3.66%	110

Q20 If you ever had to obtain technical support from DCP staff because you had difficulty logging into the CPMRS system, how satisfied were you with their response?

Answered: 3,010 Skipped: 487

ANSWER CHOICES	RESPONSES	
Very satisfied	9.27%	279
Satisfied	14.02%	422
Neither satisfied nor dissatisfied	6.01%	181
Dissatisfied	2.26%	68
Very dissatisfied	1.83%	55
Not applicable	66.61%	2,005

Q21 Would you like additional training on how to enhance your use of the CPMRS?

Answered: 3,016 Skipped: 481

ANSWER CHOICES	RESPONSES	
Yes	21.29%	642
No	78.42%	2,365

Q22 Do you have any other concerns about the CPMRS or suggested improvements that you would like to share? **(See page 19 for summary of the open-ended responses.)**

Answered: 863 Skipped: 2,634

APPENDIX C: DEPARTMENT OF CONSUMER PROTECTION IMPLEMENTATION STATUS OF BRANDEIS BEST PRACTICES FOR PRESCRIPTION DRUG MONITORING PROGRAMS

Best Practices by Category	DCP Adopted Practice	Explanation
Data Collection and Data Quality (9 practices)		
Collect data on all schedules of controlled substances	Yes	
Adopt latest ASAP reporting standard	Yes	
Collect data on non-scheduled drugs implicated in abuse as determined by the state	No	Under Consideration Gabapentin and Naloxone
Record positive identification of the person picking up prescriptions	No	Loose language in statute. Discretionary for the pharmacist to ask for ID but not required as per the best practice.
Collect data on method of payment, including cash	Yes	
Collect data daily or real time data	Yes	
Monitor pharmacy reporting compliance	No	Monitored by APPRISS, Not by DCP
Institute effective data correction and missing data procedures	No	APPRISS tracks the error rates but DCP does not do anything with them
Integrate electronic prescribing and PDMP data collection	Yes	
Data Linking and Analysis (7 practices)		
Use a proven method to match/link the same patient's records	Yes	Appriss has standard algorithm
Conduct periodic analyses to identify at-risk patients, prescribers, and dispensers	No	
Use PDMP data to conduct epidemiological analyses for surveillance, early warning, evaluation and prevention	Yes	DPH tracks certain epidemiological CDC measures that utilize data
Use automated expert software and systems to expedite analyses and reports	Yes	They have some standard reporting but developing capability using SAS for additional analytical capability - alerts, prescriber reports,
Record data on prescriber disciplinary status	Yes	
Record data on patient lock-ins	No	
Link to prescriber specialty data	No	Internal links only
User Access and Report Dissemination (28 practices)		
Provide continuous online access and automated reports to authorized users	Yes	
Customize solicited reports for different types of end-users	Yes	MyRX
Provide user-friendly interfaces, e.g. decision support tools, risk scores	Yes	NarxCARE
Enhance patient reports with summary data, e.g., MMEs, MPEs	Yes	
Allow for prescriber self-lookup	Yes	
Provide batch (multi-patient) reporting for prescribers and delegates	Yes	

Integrate PDMP reports with:		
health information exchanges	No	The Office of Health Strategy is working towards the establishment of a
electronic health records	No	Only some providers
pharmacy dispensing systems	Yes	Can be integrated with pharmacy systems
Provide PDMP data to:		
prescribers	Yes	
dispensers	Yes	
law enforcement	Yes	
licensure boards	No	Limited access provided to DPH staff investigating case specific claims on behalf of the licensure boards. Not evidentiary for proof of
medical examiners/corners	Yes	
patients	No	
Medicaid	Yes	
medical residents	Yes	
researchers (encrypted/de-identified)	No	May request de-identified data
drug courts	No	
workers' compensation programs	No	
substance abuse treatment clinicians	No	
Medicare	No	
private 3rd party payers	No	
Send unsolicited reports and/or alerts to:		
prescribers	Yes	
dispensers	Yes	
licensure boards	No	
law enforcement	No	
"user led" alerts (i.e., prescriber to prescriber if there is a concern about CS use regarding patient	Yes	NarxCARE
Enrollment, Outreach, Education and Utilization (11 practices)		
Provide presentations and trainings for end-user groups	Yes	
Provide online user guides and educational materials	Yes	
Provide prescriber report cards	Yes	
Allow delegate accounts	Yes	
Mandate PDMP enrollment:		
prescribers	Yes	
dispensers	No	
Mandate PDMP training:		
prescribers	No	Statute requires general opioid training
dispensers	No	
Mandate PDMP utilization by:		
prescribers	Yes	
dispensers	No	
Provide letters to new prescribers	Yes	
PDMP Promotion (3 practices)		
Conduct presentations	Yes	
Website content:		
Annual PDMP reports	Yes	Draft being reviewed as of 1/22/20
Data dashboards	Yes	

Inter-Organizational Coordination (3 practices)		
Engage in interstate data sharing	Yes	
Collaborate with other health agencies/organizations in applying and linking PDMP data:		
Veterans Affairs	Yes	
Indian Health Service	N/A	CT doesn't have this
PDMP Usability, Progress, and Impact (6 practices)		
Conduct satisfaction and utilization surveys of end-users	No	
Conduct audits of PDMP system utilization for appropriateness and extent of use	No	
Track/report progress in adopting practices (e.g., completing the checklist)	No	
Track/report PDMP enrollment and utilization data, prescribing, and risk measures (e.g., MPEs, MMEs)	Yes	See annual report and website
Analyze health outcome data (e.g., overdoses, deaths, hospitalizations, ER visits) to evaluate the impact of the PDMP or prescription policy changes	No	Impact of PMP is not evaluated based on health
Conduct analyses of PDMP data for surveillance, early warning, evaluation, or prevention	Yes	They share data with DPH to do this (DPH has