OVERSIGHT OF THE PRESCRIPTION MONITORING PROGRAM

LOUISIANA BOARD OF PHARMACY

PERFORMANCE AUDIT SERVICES
ISSUED APRIL 11, 2018

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April 11, 2018

The Honorable John A. Alario, Jr.,
President of the Senate
The Honorable Taylor F. Barras,
Speaker of the House of Representatives

Dear Senator Alario and Representative Barras:

This report provides the results of our performance audit of the Louisiana Board of Pharmacy (LABP). The purpose of the audit was to evaluate whether LABP provided effective oversight of the Prescription Monitoring Program (PMP) to ensure compliance with the PMP Act (Louisiana Revised Statutes 40:1001-1014).

The report contains our findings, conclusions, and recommendation. Appendix A contains LABP's response to this report. I hope this report will benefit you in your legislative decision-making process.

We would like to express our appreciation to the management and staff of LABP for their assistance during this audit.

Sincerely,

Thomas H. Cole, CPA
First Assistant Legislative Auditor

THC/aa

LABP PMP OVERSIGHT

Louisiana Legislative Auditor

Daryl G. Purpera, CPA, CFE

Oversight of the Prescription Monitoring Program
Louisiana Board of Pharmacy

April 2018

Audit Control #40170014

Introduction

We evaluated whether the Louisiana Board of Pharmacy (LABP) provided effective oversight of Louisiana's Prescription Monitoring Program (PMP) to ensure compliance with the PMP Act.[1] This act requires LABP to establish and maintain an electronic system for the monitoring of controlled substances and drugs of concern[2] dispensed in the state (e.g., opioids and ADHD medications).[3] In accordance with this legislative mandate, LABP established the PMP database in 2008. Pharmacists are required to enter dispensed prescriptions for controlled substances into the PMP database, including information about the patient, the prescribing doctor, the medication, and the dispensing pharmacy.[4] According to LABP, there were almost 12 million controlled substance prescriptions reported to Louisiana's PMP in calendar year 2017. Louisiana's most commonly dispensed controlled substance was an opioid, hydrocodone, with approximately 2.2 million transactions or more than 18% of all transactions reported to the PMP.

> The **goal** of the PMP is to improve the State's ability to identify and inhibit the diversion of controlled substances and other drugs of concern in an efficient and cost-effective manner that does not impede the appropriate use of these drugs for legitimate medical purposes.

We conducted this audit because the dispensing of addictive medications such as opioids and sedatives, as well as overdose deaths from prescription drugs, has increased in recent years. According to the Centers for Disease Control (CDC), nearly 1,000 people died in Louisiana in 2016 due to drug overdoses, an increase of 14.7% from 2015.[5] During calendar year 2016, Louisiana was one of the top states for the number of opioid prescriptions dispensed, averaging 98.1 prescriptions per 100 persons.

[1] Louisiana Revised Statutes (R.S.) 40:1001-1014

[2] According to R.S. 40:1003, "drugs of concern" means drugs other than controlled substances which demonstrate a potential for abuse. For purposes of this report, "controlled substances" will include drugs of concern since Louisiana Administrative Code (46:2901) currently only recognizes one drug of concern (butalbital with acetaminophen).

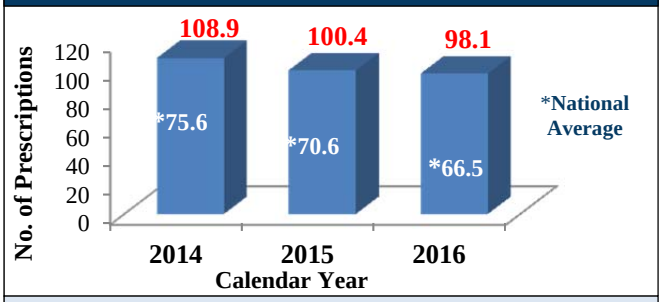
[3] R.S. 40:1004

[4] R.S. 40:1006

[5] CDC, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention (December 2017), https://www.cdc.gov/drugoverdose/data/statedeaths.html

Although Louisiana's prescription frequency has been decreasing since calendar year 2014, the calendar year 2016 rate is still 47.5% higher than the national average of 66.5 opioid prescriptions per 100 persons.[6] Exhibit 1 shows Louisiana's prescription frequency for calendar years 2014 through 2016. See Appendix D for prescription counts by Louisiana parish for calendar years 2013 through 2017 and prescription frequency, by parish, for calendar year 2016.

Exhibit 1: Rate of Opioid Prescriptions Dispensed per 100 Persons in Louisiana Calendar Years 2014 through 2016



Source: Prepared by legislative auditor's staff using data provided by the CDC National Center for Injury Prevention and Control.

While R.S. 40:1007 requires that LABP review prescription monitoring information, state law does not specify what should be reviewed. However, best practices recommend that PMP administrators use PMP data to identify questionable activity involving controlled substances such as "doctor shopping" (see text box) or unethical prescribing or dispensing practices. As of June 12, 2017, R.S. 40:978 requires prescribers to access and review patients' records in the PMP database prior to initially writing prescriptions for opioids in certain circumstances. Other users such as law enforcement, professional licensing boards, and representatives from the Louisiana Medicaid program are also allowed access to information in the PMP database. Since multiple users rely on the PMP database to make decisions and track the dispensing of controlled substances, it is important that the database contain accurate and complete information.[7] For instance, law enforcement made 831 requests for prescription monitoring information from LABP in calendar year 2017 for investigation purposes.

Doctor shopping refers to the practice of a patient requesting care from multiple physicians, often simultaneously, without making efforts to coordinate care or informing the physicians of the multiple caregivers.

The objective of this performance audit was to:

Evaluate whether LABP provided effective oversight of the Prescription Monitoring Program to ensure compliance with the Prescription Monitoring Program Act.

Overall, we found that while LABP maintains and reviews the PMP database as required by state law and has implemented many recommended best practices, it cannot ensure that the database is complete and accurate. The issues we identified are summarized on the next page and discussed in further detail throughout the remainder of the report. The report also contains the following appendices:

- Appendix A contains LABP's response to this report.
- Appendix B details our scope and methodology.

[6] *Annual Surveillance Report of Drug-Related Risks and Outcomes*, CDC National Center for Injury Prevention and Control, 2017

[7] Appendix E contains the number of users of the PMP for calendar year 2017 as well as other metrics on the PMP.

- Appendix C contains examples of controlled substances that must be reported to the PMP and the controlled substances with the highest number of prescriptions for calendar year 2017 in Louisiana's PMP.

- Appendix D details the number of opioid prescriptions, by parish, for calendar years 2013 through 2017 and the prescription frequency for each parish in 2016.

- Appendix E includes additional metrics on the PMP, including the number of PMP users, the number of prescriptions reported to the PMP each year, and the number of times pharmacists and prescribers searched the PMP each year.

- Appendix F contains recommended best practices for the PMP and the status of LABP's implementation of each.

Objective: Evaluate whether LABP provided effective oversight of the Prescription Monitoring Program to ensure compliance with the Prescription Monitoring Program Act.

Overall, we found that while LABP maintains and reviews the PMP database as required by law and has implemented many recommended best practices,[8] it cannot ensure that the database is complete and accurate because of the following issues:

- **LABP needs a more comprehensive process to ensure that the PMP contains complete prescription information.** We found that 161 (5.0%) of 3,222 Workers' Compensation prescriptions and 14,467 (3.0%) of 484,173 Medicaid prescriptions for hydrocodone and oxycodone dispensed during calendar year 2016 were missing from the PMP. While the percentages are not high, they represent 14,628 missing hydrocodone and oxycodone prescriptions in a one-year period.

- **While LABP has the authority to penalize pharmacies that do not correct PMP submission errors in a timely manner, it does not have a process to identify noncompliant pharmacies on a regular basis.** We identified more than 25,500 prescriptions dispensed during calendar year 2016 with outstanding errors that had not been released into Louisiana's PMP as of November 2017.

In addition, LABP should expand its review of PMP data to proactively identify doctors, pharmacists, and patients with questionable activity related to controlled substances. We identified potential instances of "doctor shopping," prescriptions for excessive quantities of controlled substances, and use of forged and expired prescriptions. These issues are explained in more detail throughout the remainder of the report along with recommendations to strengthen LABP's oversight of the PMP.

[8] See Appendix F for a compilation of best practices that LABP has implemented as well as those in progress to further improve Louisiana's PMP.

LABP needs a more comprehensive process to ensure that the PMP contains complete prescription information. We found that 161 (5.0%) of 3,222 Workers' Compensation prescriptions and 14,467 (3.0%) of 484,173 Medicaid prescriptions for hydrocodone and oxycodone dispensed during calendar year 2016 were missing from the PMP.

The PMP Act and Louisiana Administrative Code[9] require pharmacists to submit information regarding each dispensed prescription for controlled substances to the PMP database no later than the next business day.[10] Information that must be submitted includes:

- **Prescriber information**, including doctor name and Drug Enforcement Administration (DEA) registration number
- **Patient information**, including name, address, date of birth, and identification number from a driver's license or other ID
- **Prescription information**, including prescription number, date written, and date filled
- **Drug (controlled substance) information**, including National Drug Code, quantity dispensed, and days' supply
- **Dispenser (pharmacy) information**, including DEA registration number, or in the alternative, the National Provider Identifier number

Incomplete PMP data reduces the effectiveness of the program. Complete PMP data can assist a doctor in making the decision to not prescribe or a pharmacist to not fill a prescription for a high-risk patient. According to a statewide survey of 2,135 currently licensed pharmacists that we conducted in October 2017,[11] 534 (78.0%) of 685 respondents stated they refused to fill a prescription, and 562 (82.0%) respondents contacted the prescriber based on information in the PMP.

[9] R.S. 40:1006 and LAC 46:2913

[10] R.S. 40:1003 exempts hospital pharmacies that dispense controlled substances for the purposes of inpatient hospital care and practitioners who dispense no more than a single 48-hour supply of controlled substances to a patient prior to or subsequent to performing an actual procedure on that patient from reporting to the PMP. In addition, veterinarians are also exempted from reporting controlled substances dispensed in their practice by R.S. 40:1004.

[11] We sent the survey to 9,692 pharmacists currently licensed in Louisiana, and 2,135 (22.0%) pharmacists responded to at least one question.

"(The PMP database) allows me to feel more confident that I am being diligent in my effort to provide the best patient care and patient information."

Source: LLA Pharmacist Survey (conducted October 2017)

We found that 161 (5.0%) of 3,222 Workers' Compensation prescriptions and 14,467 (3.0%) of 484,173 Medicaid prescriptions for hydrocodone and oxycodone dispensed during calendar year 2016 were missing from the PMP as of April 2017.[12] To determine whether all prescriptions were being entered into the PMP, we compared Workers' Compensation pharmacy claims paid by the State's Office of Risk Management (ORM) and Medicaid pharmacy claims paid by the Louisiana Department of Health (LDH) to the PMP. We found that 161 (5.0%) of 3,222 Workers' Compensation and 14,467 (3.0%) of 484,173 Medicaid prescriptions for hydrocodone and oxycodone dispensed during 2016 were not in the PMP as of April 2017.[13] While the percentages are not high, they represent 14,628 missing hydrocodone and oxycodone prescriptions in a one-year period.

LABP should expand its current process for compliance testing to identify more pharmacies that fail to submit prescriptions to the PMP as required. LABP currently conducts periodic compliance testing of PMP data in order to monitor reporting activity and identify pharmacies that do not report *any* prescriptions on a given day. When LABP identifies a noncompliant pharmacy, the pharmacy is notified of the missing data and may be sanctioned if it fails to input the prescriptions after notification by the board.[14]

LABP started tracking the results of compliance testing in June 2017 and had tested 214 (11.0%) of the 1,950 pharmacies required to report to the PMP as of October 2017. These 214 pharmacies were identified as high-risk for noncompliance based on a delinquency report provided by Appriss, the PMP software vendor. As a result of these compliance tests, LABP identified 153 (71.5%) pharmacies that were not reporting as required; however, these pharmacies ultimately came into compliance after notification from LABP. Since the results of these tests showed that 71.5% of the pharmacies tested were not reporting to the PMP as required, LABP should expand its current compliance testing to include a higher percentage of pharmacies. According to LABP, its goal is to test all pharmacies that are required to report to the PMP. However, staff has been focused on implementing new legislation aimed at improving the PMP, including prescriber mandates and automatic PMP registration. In addition, the board has not established expectations for the number and frequency of tests that staff are required to conduct, nor how long pharmacies have to report missing prescription information.

LABP does not currently have a process to identify pharmacies that do not report *all* required prescriptions filled on a given day to the PMP. While LABP's current compliance testing can identify pharmacies that fail to report *any* prescriptions to the PMP for a given day, LABP cannot ensure that pharmacies report *all* required prescriptions filled on a given day. For example, a pharmacy could dispense 12 prescriptions for hydrocodone, only report 11 to the PMP, and LABP's compliance testing would show that the pharmacy was compliant in reporting

[12] Some of these prescriptions may have been missing from the PMP database because of outstanding errors that were eventually corrected and thus released to the database, as discussed later in the report.
[13] The Medicaid and Workers' Compensation pharmacy claims data is unaudited by LLA. Data errors in these pharmacy claims data could result in a lower number of missing prescriptions.
[14] R.S. 40:1009 authorizes LABP to sanction pharmacies that fail to submit prescription information as required, or fail to correct data after notification by the board, as it deems appropriate.

prescription information to the PMP for that day. LABP would only become aware of the one missing prescription if the prescriber or pharmacist notified LABP of missing information. While LABP does not have the authority to review Medicaid or Workers' Compensation pharmacy claim data like we did to identify individual missing prescriptions, the results of this analysis show the need for LABP to further monitor the completeness of PMP data.

LABP could help ensure the PMP's completeness by incorporating PMP audits as part of its routine inspections of pharmacies that occur at least every two years. LABP compliance officers could review a sample of dispensed prescriptions for controlled substances at each pharmacy to ensure they were all entered correctly into the PMP, as recommended by best practices. According to LABP, the inability to ensure pharmacies report all required prescriptions is a common concern for State PMP programs. Other states rely on compliance testing alone to ensure PMP completeness, similar to LABP. The Prescription Drug Monitoring Program Training and Technical Assistance Center (Center) at Brandeis University[15] states that PMP administrators should compare reported PMP prescriptions to prescriptions dispensed by the pharmacy.[16]

LABP stated that it does not currently have enough staff to include PMP audits as a part of all routine pharmacy inspections. However, LABP could use a risk-based approach to conduct PMP audits at pharmacies with a high number of filled controlled substance prescriptions, a prior PMP violation history, or a large volume of prescriptions paid for with cash.[17] In addition, LABP could also require pharmacies to self-audit and attest to the completeness of their PMP entries. For example, the Center at Brandeis University recommends pharmacies routinely search the PMP for a list of prescriptions that have been dispensed from their location to compare to their internal records.[18]

Recommendation 1: LABP should expand its current process for compliance testing on PMP data so it can identify more pharmacies that do not report as required by R.S. 40:1009. This process should be documented in a formalized policy that includes the number of tests that staff should conduct, how often, and how long pharmacies are given to report missing prescription information.

Summary of Management's Response: LABP agrees with this recommendation and states that it will develop and implement formal policies for compliance monitoring, including parameters for the number of tests to be performed, their frequency, and a timeline for response by pharmacies with missing information. See Appendix A for LABP's full response.

[15] This is a private research university in Massachusetts that worked with the Pew Charitable Trusts to research PMP best practices.
[16] "PDMP Suggested Practices to Ensure Pharmacy Compliance and Improve Data Integrity," (April 2015) http://www.pdmpassist.org/pdf/Pharmacy_compliance_data_quality_TAG__FINAL_20150615.pdf
[17] Prescriptions that are paid for with cash are a higher risk for questionable activity because these prescriptions are not reviewed by a third party, such as Medicaid or private insurers.
[18] "Prescription Drug Monitoring Programs: An Assessment of the Evidence for Best Practices," (September 2012) http://www.pewtrusts.org/~/media/assets/0001/pdmp_update_1312013.pdf

Recommendation 2: LABP should develop a process for ensuring that pharmacies are reporting all prescriptions as required by using a risk-based approach and incorporating PMP audits into its routine inspections.

Summary of Management's Response: LABP agrees with this recommendation and states that the Board will evaluate the possible addition of another compliance officer, which would allow the incorporation of PMP audits into routine inspections without compromising all of their other assignments. In addition, LABP's software has a new capability that allows a pharmacy to review all of its transactions in the PMP database and compare that information to the transactions in their dispensing information systems. The Board will evaluate the option to require pharmacies to self-certify their reporting compliance, with penalties attached for their failure to do so or to ensure the completeness of their transmissions. See Appendix A for LABP's full response.

While LABP has the authority to penalize pharmacies that do not correct PMP submission errors in a timely manner, it does not have a process to identify noncompliant pharmacies on a regular basis. We identified more than 25,500 prescriptions dispensed during calendar year 2016 with outstanding errors that had not been released into Louisiana's PMP as of November 2017.

Although R.S. 40:1006 requires pharmacies to report prescriptions to the PMP database by the end of the next business day, these transactions do not appear in the PMP database for approximately two days while the PMP software vendor, Appriss, processes the data. Part of this processing involves Appriss identifying missing or invalid information in prescription transactions, such as a missing identifier for the patient, a missing or invalid DEA number, or a missing date of birth. When Appriss identifies prescription transactions that contain such errors, these transactions are held in a "clearinghouse" until the pharmacy corrects the error and Appriss can release the prescription into the PMP database. Appriss is responsible for notifying the pharmacy of the error via an email alert. However, it does not follow up to ensure that the error is corrected and does not notify LABP of the outstanding errors so that the board can ensure that pharmacies fix the data errors. As a result, LABP is not able to identify pharmacies with pending error transactions to ensure they are correcting the errors timely.

According to an error report we received from Appriss, as of November 14, 2017, more than 25,500 prescriptions dispensed during calendar year 2016 had outstanding errors that prevented them from being released into Louisiana's PMP database. We provided this error report to LABP, and it is currently following up with pharmacies to ensure that all outstanding errors are corrected so that Appriss can release the prescription transactions to the PMP database. According to LABP, it will request that Appriss provide error reports on a regular basis in the future. The error report also describes the error that prevented Appriss from releasing the transaction to the PMP database. The most common error in calendar year 2016 involved pharmacies failing to enter required identification numbers for each patient, such as a

Social Security number or a driver's license number. According to LABP, errors are also caused by pharmacy software issues that prevent dispensed controlled substances from being reported to the PMP, such as a drug not being accurately coded as a controlled substance in the pharmacy's point of sale system. LABP could use this information to educate pharmacies about avoiding common errors so that fewer transactions are delayed from appearing in the PMP database.

A new state law (R.S. 40:1009), which became effective in June 2017, allows LABP to impose sanctions for pharmacies that fail to correct data after being notified. However, the new law does not include a timeframe for how quickly the errors must be corrected. Therefore, LABP should establish and enforce a timeframe requirement for correcting errors, as well as formalize the sanctions that will be imposed on noncompliant pharmacies.

Recommendation 3: LABP should ensure that its PMP software vendor, Appriss, provides error reports on a routine basis, potentially by making the delivery of such reports a contract requirement.

Summary of Management's Response: LABP agrees with this recommendation and states that the current purchase order held by Appriss is scheduled to expire in November 2018. LABP is preparing the specifications for the next public bid and has already added the advanced version of the Appriss error reports to those specifications. See Appendix A for LABP's full response.

Recommendation 4: LABP should regularly review error reports and penalize pharmacies that fail to correct errors in a timely manner.

Summary of Management's Response: LABP agrees with this recommendation and states that as it improves the error report process, the Board will exercise its new authority when appropriate. See Appendix A for LABP's full response.

Recommendation 5: LABP should use the results of the error report to educate pharmacies about avoiding common errors so that fewer transactions are delayed from appearing in the PMP database.

Summary of Management's Response: LABP agrees with this recommendation and states that it anticipates the error report summary from Appriss will facilitate the educational outreach to the pharmacies. See Appendix A for LABP's full response.

Recommendation 6: LABP should formally establish a timeframe requirement for pharmacies to correct data errors and sanction pharmacies that do not comply with such timeframes.

Summary of Management's Response: LABP agrees with this recommendation and states that it will evaluate whether such a timeline can be established by policy or whether promulgation of a rule is required. LABP will then complete the appropriate process and notify the pharmacies of the penalties associated with noncompliance. See Appendix A for LABP's full response.

LABP should expand its review of PMP data to proactively identify doctors, pharmacists, and patients with questionable activity. We identified potential instances of "doctor shopping," prescriptions for excessive quantities of controlled substances, and use of forged and expired prescriptions.

Analysis of PMP data is an important tool for identifying doctors, pharmacists, and patients with questionable activity involving controlled substances. R.S. 40:1007 requires LABP to review prescription monitoring information, and best practices[19,20] recommend that PMP administrators use PMP data to identify questionable activity such as "doctor shopping" or unethical prescribing and dispensing practices. If LABP's review results in reasonable suspicion that a breach of professional standards may have occurred, the board is required by state law[21] to notify the appropriate licensing agency for an investigation. For example, LABP refers doctors with questionable prescribing activity to the Louisiana State Board of Medical Examiners. Patients with questionable activity are referred to their doctors for review or to law enforcement for investigation. CDC best practices state that PMPs are more than just passive databases in that they can be used to send "proactive" reports to authorized users to protect patients at the highest risk and identify inappropriate prescribing trends.[22]

Currently, LABP is only able to use Appriss software to conduct basic analyses such as total prescriptions dispensed by drug type, counts of PMP searches, and counts of registered users. To improve its ability to analyze PMP data, LABP planned to purchase an advanced data analytics package from Appriss, which would allow it to analyze prescriber activity, patient demographics related to prescriptions, morphine milligram equivalents, combination therapies (e.g., when a person is taking an opioid and a benzodiazepine at the same time), prescription overlap, and treatment duration. LABP anticipated implementation during calendar year 2017; however, Appriss did not complete development of the advanced analytics package until February 2018. Since LABP's contract with Appriss expires in November 2018, LABP stated it will include the advanced analytics package as a requirement in its new bid for a PMP software vendor.

LABP is the only entity with the ability to analyze the entire PMP database and identify patterns of possible nonmedical or dangerous use of prescription drugs. R.S. 40:1007 authorizes other users to access PMP data for specific purposes, such as the Board of Medical Examiners to regulate its licensed prescribers, coroners to investigate deaths, licensed substance abuse addiction counselors to provide treatment, and Medicaid representatives to monitor Medicaid program recipients. However, none of these users have the authority to

[19] National Alliance for Model State Drug Laws (NAMSDL) "Components of a Strong Prescription Monitoring Program" (2015) http://www.namsdl.org/library/8B509B0A-D51E-472E-B9F10054CE52F2F6/

[20] The Prescription Drug Monitoring Program Center of Excellence at Brandeis University, "Prescription Drug Monitoring Programs: An Assessment of the Evidence for Best Practices" (2012) http://www.pewtrusts.org/~/media/assets/0001/pdmp_update_1312013.pdf

[21] R.S. 40:1007

[22] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention (October 2017), https://www.cdc.gov/drugoverdose/pdmp/states.html

analyze the PMP data to look for patterns of possible nonmedical or dangerous use of prescription drugs.

According to the Substance Abuse and Mental Health Services Administration, analyzing the PMP data can identify the following questionable activity:[23]

- Prescribing rates that are consistently higher or lower for different types of controlled substances (e.g., opioids, benzodiazepines, stimulants)
- Providers prescribing, or pharmacies dispensing, controlled substances in excessive quantities
- Patients prescribed dangerous combinations of drugs (e.g., concurrent prescriptions for opioids and benzodiazepines)
- Patients potentially addicted and receiving multiple prescriptions for commonly misused drugs from multiple prescribers/and or pharmacies – also known as doctor/pharmacy shopping
- Geographic locations of patients, by zip code, receiving dangerous combinations of drugs and/or engaging in doctor/pharmacy shopping

We analyzed PMP data for potential instances of prescriptions with excessive quantities, doctor/pharmacy shopping, forged prescriptions, and expired prescriptions to show LABP the benefits of expanding its review of prescription monitoring information. The results of our analyses are discussed below.

We identified 1,393 patients who were potentially doctor/pharmacy shopping during calendar year 2016. To identify possible doctor/pharmacy shoppers, best practices[24] recommend that PMP administrators consider the number of doctors and the number of pharmacies used by a patient during a specified period of time. A common threshold when identifying doctor/pharmacy shopping is four or more doctors and four or more pharmacies during a one-month period. PMP administrators should then review the complete prescription history of each patient to eliminate those that appear to have a legitimate medical need for these prescriptions based on the medications or the prescribing doctors' specialties, such as those patients that likely have cancer or a terminal illness and are in hospice.

[23] Substance Abuse and Mental Health Services Administration's Center for the Application of Prevention Technologies, "Using Prescription Drug Monitoring Program Data to Support Prevention Planning" (2017) https://www.samhsa.gov/capt/sites/default/files/resources/pdmp-overview.pdf

[24] The Prescription Drug Monitoring Program Center of Excellence at Brandeis University, "Prescription Drug Monitoring Programs: An Assessment of the Evidence for Best Practices" (2012) http://www.pewtrusts.org/~/media/assets/0001/pdmp_update_1312013.pdf

Using PMP data, we identified 1,393 patients with prescriptions for controlled substances written by four or more doctors that were filled by four or more pharmacies during one month in calendar year 2016, including one patient with 13 prescriptions for opioids and benzodiazepines from seven doctors filled at six pharmacies during December 2016, as shown in Exhibit 2.

Exhibit 2
Example of Doctor/Pharmacy Shopping Testing Results
December 2016

Date Filled	Generic Drug Name	Drug Type	Days' Supply	Doctor	Pharmacy
12/5/2016	Oxycodone	Opioid	2	Doctor #2	Pharmacy #2
12/6/2016	Alprazolam	Benzodiazepine	30	Doctor #3	Pharmacy #3
12/7/2016	Nucynta	Opioid	12	Doctor #3	Pharmacy #3
12/22/2016	Clonazepam	Benzodiazepine	7	Doctor #5	Pharmacy #5
12/23/2016	Lorazepam	Benzodiazepine	3	Doctor #6	Pharmacy #5
12/23/2016	Oxycodone	Opioid	3	Doctor #6	Pharmacy #5
12/25/2016	Alprazolam	Benzodiazepine	7	Doctor #1	Pharmacy #1
12/25/2016	Oxymorphone	Opioid	7	Doctor #1	Pharmacy #1
12/25/2016	Oxycodone	Opioid	5	Doctor #1	Pharmacy #1
12/29/2016	Alprazolam	Benzodiazepine	30	Doctor #3	Pharmacy #4
12/30/2016	Nucynta	Opioid	30	Doctor #3	Pharmacy #4
12/31/2016	Oxycodone	Opioid	6	Doctor #4	Pharmacy #2
12/31/2016	Opana	Opioid	12	Doctor #4	Pharmacy #1

Source: Created by legislative auditor's staff using PMP data.

While the 1,393 patients we identified that exceeded the threshold may have legitimate medical needs for these prescriptions, this testing identifies potential questionable activity that requires further investigation. According to LABP staff, they conducted this type of analysis in the past, but suspended it in March 2016 so that staff could focus on the software system transition to its current PMP vendor, Appriss.

We found prescriptions that were filled during calendar year 2016 for potentially excessive quantities of a medication that can be used to make a street drug ("Purple Drank") and a medication that is used as a date rape drug. We conducted analyses on two specific medications that LABP identified as high risk for abuse or diversion, promethazine with codeine and zolpidem, as summarized below.

Promethazine with codeine is a cough syrup which, when mixed with alcohol, takes the street name "Purple Drank." According to LABP, prescriptions for promethazine with codeine, in quantities of 473mL or greater, are uncommon and warrant additional investigation. Using PMP data, we identified 26 patients with 11 or more prescriptions for promethazine with codeine at 473mL or greater during calendar year 2016. We also identified a doctor who wrote more than 200 prescriptions for promethazine with codeine at 473mL or greater during 2016.

Zolpidem, commonly known by the brand name *Ambien*, is a treatment for insomnia that has been misused as a date rape drug. According to LABP staff, the recommended maximum daily dose for zolpidem is 10mg. We identified 15 patients who filled prescriptions equal to more than 10mg per day during 2016. One patient filled prescriptions from six different doctors for a total of 10,260mg during 2016, which is almost three times the recommended daily dosage.

We provided LABP with the results of our analyses, and its staff are actively looking into these instances.

We identified instances where 15 patients potentially used forged prescriptions, and 115 pharmacies filled more than 260 expired prescriptions for hydrocodone in 2016. LABP could also use PMP data to identify issues including patients using forged prescriptions and pharmacists dispensing controlled substances after the prescriptions are more than 90 days old and have expired.[25] Using PMP data, we identified 15 patients with prescriptions for the same drug from the same doctor filled at different pharmacies for more than a 365-day supply of the medication. According to LABP, these are indicators of forged prescriptions. Most of these prescriptions were for dextroamphetamine, which is used to treat attention deficit hyperactivity disorder (ADHD) and is a commonly misused drug. We also identified more than 260 prescriptions for hydrocodone that were filled after the prescription had expired (90 days).

Recommendation 7: LABP should resume testing on a routine basis so that it can identify patients that are potentially doctor or pharmacy shopping**.**

Summary of Management's Response: LABP agrees with this recommendation and states that it is evaluating the feasibility of additional staffing for the program to perform the additional tasks recommended by LLA's report, including the resumption of threshold testing. See Appendix A for LABP's full response.

Recommendation 8: LABP should continue to work with its PMP software vendor to develop and implement automated data analytics to identify doctors, pharmacists, and patients with questionable activity involving controlled substances.

Summary of Management's Response: LABP agrees with this recommendation and states that it has received a quote from Appriss for the advanced analytics package. See Appendix A for LABP's full response.

Recommendation 9: LABP should follow up on red flags from our analyses and alert appropriate authorities/boards as necessary, in accordance with its normal process.

[25] According to R.S. 40:978, no prescription for a Schedule II substance may be refilled nor may such prescription be filled more than ninety days after the date of the prescription.

Summary of Management's Response: LABP agrees with this recommendation and states that it has directed staff to follow up on the red flags from LLA's analysis and to make the appropriate referrals as necessary. A preliminary review of some of the red flags revealed that the issues of concern identified within the audit period have since been resolved. For example, patients exceeding certain threshold levels indicating potential "doctor shopping" activity no longer exceed those thresholds due to improved prescriber monitoring of patient prescription records. See Appendix A for LABP's full response.

APPENDIX A: MANAGEMENT'S RESPONSE

Louisiana Board of Pharmacy

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April 5, 2018

Daryl G. Purpera, CPA, CFE
Louisiana Legislative Auditor
1600 North Third Street
Baton Rouge, LA 70804-9397
Via e-mail: dpurpera@lla.la.gov

Re: Audit Report No. 40170014 – Oversight of the Prescription Monitoring Program

Dear Mr. Purpera:

The Prescription Monitoring Program (PMP) Law was enacted in 2006. That law directed the Board of Pharmacy to establish and maintain a database of prescription transactions for controlled substances dispensed to Louisiana residents, to provide access to the database information by certain persons identified in the PMP law, and to review the prescription transactions in support of the program's goal: to improve the state's ability to identify and inhibit the diversion of controlled substances and other drugs of concern in an efficient and cost-effective manner that does not impede the appropriate use of these drugs for legitimate medical purposes.

As noted in your report, optimal utility of the database information relies on the accuracy and completeness of the data therein. For that reason, the Board has endeavored to ensure compliance with the reporting mandate imposed on the pharmacies. Although 100% compliance is the goal, the challenge has been to minimize the variance through efficient monitoring and follow-up with the pharmacies reporting the transactions. Your audit identified 95% compliance with respect to hydrocodone and oxycodone prescriptions filed with the Workers Compensation program and 97% compliance with respect to prescriptions for those same two drugs filed with the Medicaid program. There is no information to suggest a different rate of compliance for any other subset of controlled substance prescriptions, which leads us to believe the program has achieved approximately 95% compliance.

Your report identified several findings and recommendations designed to achieve that final 5% compliance as well as recommendations to improve the use of the PMP information. In summary, we agree with all of your recommendations, and as noted below, we have already initiated some of the recommended actions.

Finding 1: LABP needs a more comprehensive process to ensure that the PMP contains complete prescription information. We found that 161 (5.0%) of 3,222 Workers Compensation prescriptions and 14,467 (3.0%) of Medicaid prescriptions for hydrocodone and oxycodone dispensed during 2016 were missing from the PMP.

Recommendation 1: LABP should expand its current process for compliance testing on PMP data so it can identify more pharmacies that do not report as required by R.S. 40:1009. This process should be documented in a formalized policy that includes the number of tests that staff should conduct, how often, and how long pharmacies are given to report missing prescription information.

Prior to the second change of program software in 2016, the staff had a process in place to monitor compliance of pharmacies reporting their data for each eligible day. The new software acquired in 2016 included new compliance monitoring capability, and by June 2017, staff began tracking their compliance testing. The 2017 Legislature adopted legislation requiring automated registration of prescribers for database access privileges. A significant amount of new data entry was required to implement that legislative mandate, which reduced the amount of time available to monitor pharmacy compliance.

Staff has nearly completed the implementation of automated registration, which will facilitate the resumption of more thorough compliance monitoring. Although the compliance monitoring has been in place, there was no formal policy in place. The Board will develop and implement formal policies for compliance monitoring, including parameters for the number of tests to be performed, their frequency, and a timeline for response by pharmacies with missing information.

Recommendation 2: LABP should develop a process for ensuring that pharmacies are reporting all prescriptions as required by using a risk-based approach and incorporating PMP audits into its routine inspections.

While our compliance testing measures whether a pharmacy reports data on a daily basis, those measures do not ensure a pharmacy reports all eligible transactions every day. The only way to ensure every pharmacy reports every transaction every day in a timely manner is to perform an on-site audit at all 1,983 licensed pharmacies every day. While that is not feasible, we can adopt other measures which should improve the compliance.

There is new software capability which will allow a pharmacy to review all of its transactions in the PMP database and compare that information to the transactions in their dispensing information systems. We have completed the configuration of that option and activated it earlier this week. We are developing the communication plan to educate the pharmacy community of this new functionality. The Board will evaluate the option to require pharmacies to self-certify their reporting compliance, with penalties attached for their failure to do so or to ensure the completeness of their transmissions.

We have discussed the incorporation of PMP audits into the routine inspections of pharmacies. The Board's compliance officers are responsible for inspecting the pharmacies and other facilities as well as the investigation of complaints against any of the licensees. We believe our six compliance officers are operating at capacity; at times, they struggle to complete all of their

assignments. The Board will evaluate the possible addition of another compliance officer, which would allow the incorporation of PMP audits into routine inspections without compromising all of their other assignments.

Finding 2: While LABP has the authority to penalize pharmacies that do not correct PMP submission errors in a timely manner, it does not have a method to identify noncompliant pharmacies on a regular basis. We identified more than 25,500 prescriptions dispensed during calendar year 2016 with outstanding errors that had not been released into Louisiana's PMP as of November 2017.

Recommendation 3: LABP should ensure that its PMP software vendor, Appriss, provides error reports on a routine basis, potentially by making the delivery of such reports a contract requirement.

The current purchase order held by Appriss is scheduled to expire in November 2018. We are preparing the specifications for the next public bid and have already added the advanced version of the Appriss error reports to those specifications

Recommendation 4: LABP should regularly review error reports and penalize pharmacies who fail to correct errors in a timely manner.

Act 241 of the 2017 Legislature amended the PMP Law to authorize the Board to penalize pharmacies which fail to correct errors in a timely manner after notice by the Board. As we improve the error report process, the Board will exercise that new authority when appropriate.

Recommendation 5: LABP should use the results of the error report to educate pharmacies about avoiding common errors so that fewer transactions are delayed from appearing in the PMP database.

We anticipate the error report summary from Appriss will facilitate that educational outreach to the pharmacies.

Recommendation 6: LABP should formally establish a timeframe requirement for pharmacies to correct data errors and sanction pharmacies that do not comply with such timeframes.

We will evaluate whether such a timeline can be established by policy or whether promulgation of a rule is required. We will complete the appropriate process and notify the pharmacies of the penalties associated with noncompliance.

Finding 3: LABP should expand its review of PMP data to proactively identify doctors, pharmacists, and patients with questionable activity. We identified potential instances of "doctor shopping", prescriptions for excessive quantities of controlled substances, and use of forged and expired prescriptions.

Recommendation 7: LABP should resume threshold testing on a routine basis so that it can identify patients that are potentially doctor or pharmacy shopping.

Our staff routinely conducted threshold testing in the early days of the program but reduced that activity to focus on compliance monitoring and the

implementation of new legislative mandates. We are evaluating the feasibility of additional staffing for the program to perform the additional tasks recommended by this report, including the resumption of threshold testing.

Recommendation 8: LABP should continue to work with its PMP software vendor to develop and implement automated data analytics to identify doctors, pharmacists, and patients with questionable activity involving controlled substances.

We have received a quote from Appriss for the advanced analytics package.

Recommendation 9: LABP should follow up on red flags from our analyses and alert appropriate authorities/boards as necessary, in accordance with its normal process.

We have directed staff to follow up on the red flags from your analysis and to make the appropriate referrals as necessary. A preliminary review of some of the red flags revealed that the issues of concern identified within the audit period have since been resolved. For example, patients exceeding certain threshold levels indicating potential 'doctor-shopping' activity no longer exceed those thresholds due to improved prescriber monitoring of patient prescription records.

Since the Board does not have access to the other databases (Workers Compensation and Medicaid) used for this audit, we appreciate the inclusion of that information for this audit. While the audit did not find 100% compliance, we believe the finding of 95% compliance is not unreasonable. We will certainly endeavor to reduce that last 5% in an effective and efficient manner, using the recommendations offered in the report. Thank you for the opportunity to reply to your audit findings and recommendations.

For the Board:

Carl W. Aron
President

APPENDIX B: SCOPE AND METHODOLOGY

We conducted this performance audit under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. The purpose of this audit was to evaluate the Louisiana Board of Pharmacy's (LABP) oversight of the Prescription Monitoring Program (PMP). Our audit covered fiscal years 2013 through 2016. Our audit objective was to:

Evaluate whether LABP provided effective oversight of the Prescription Monitoring Program to ensure compliance with the Prescription Monitoring Program Act.

We conducted this performance audit in accordance with generally-accepted *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide reasonable basis for our findings and conclusions based on our audit objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. To answer our objective, we reviewed internal controls relevant to the audit objective and performed the following audit steps:

- Researched and reviewed relevant State legal statutes, agency policies, training materials, and best practices criteria related to Prescription Monitoring Programs, including the PEW Charitable Trust, "Prescription Drug Monitoring Programs: Evidence-based practices to optimize prescriber use" (2016); The Prescription Drug Monitoring Program Center of Excellence at Brandeis University, "Prescription Drug Monitoring Programs: An Assessment of the Evidence for Best Practices," National Alliance for Model State Drug Laws, "Components of a Strong Prescription Monitoring Program" (2015); and Substance Abuse and Mental Health Services Administration's Center for the Application of Prevention Technologies, "Using Prescription Drug Monitoring Program Data to Support Prevention Planning" (2017).

- Interviewed LABP management as well as other stakeholders, including the Louisiana Independent Pharmacists Association and the Louisiana Pharmacists Association.

- Developed and conducted a statewide survey that was sent via email to 9,667 pharmacists currently licensed in Louisiana to identify their perceptions regarding three ongoing performance audits; received 2,135 (22.1%) responses.

- Obtained PMP data from LABP's software vendor, Appriss. Performed limited data reliability testing and analyzed data to test for compliance with law and policy and to identify questionable activity such doctor/pharmacy shopping, prescriptions for excessive quantities of controlled substances, and use of forged and expired prescriptions.

- Obtained Medicaid pharmacy claims data from LDH and Workers' Compensation pharmacy claims data from ORM for calendar year 2016 and used the data sets to test compliance with PMP reporting requirements. We sent examples of missing Workers' Compensation claims to ORM to verify they were valid claims.

APPENDIX C: EXAMPLES OF CONTROLLED DANGEROUS SUBSTANCES REPORTED TO PMP DATABASE

The exhibit below contains examples of controlled dangerous substances that are required to be reported to the PMP by pharmacists. Schedule I drugs are not included in the PMP, as these drugs have no currently-accepted medical use and have a high potential for abuse (e.g., heroin, marijuana, LSD, Ecstasy, peyote, etc.).

Examples of Controlled Dangerous Substances Reported in the PMP by Schedule

Schedule*	Description	Drug Name
II	High potential for abuse, with use potentially leading to severe psychological or physical dependence	Oxycodone (OxyContin)
		Meperidine (Demerol)
		Hydrocodone (Vicodin)
		Amphetamine (Adderall)
III	Moderate to low potential for physical and psychological dependence; abuse potential is less than Schedule II but more than Schedule IV	Anabolic steroids (Body Building Drugs)
		Buprenorphine (Suboxone)
		Testosterone
		Ketamine ("Special K")
IV	Low potential for abuse and low risk of dependence	Carisoprodol (Soma)
		Clonazepam (Klonopin)
		Diazepam (Valium)
		Zolpidem (Ambien)
V	Lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics; generally used for antidiarrheal, antitussive, and analgesic purposes	Pregabalin (Lyrica)
		Robitussin AC
		Lacosamide (Vimpat)
		Pyrovalerone (Centroton)

***Schedule I drugs are illegal and thus not reported to the PMP database.
Source: Created by legislative auditor's staff using information obtained from the U.S. Drug Enforcement Agency.

The following exhibit shows the controlled substances with the highest number of prescriptions in Louisiana's PMP during calendar year 2017.

Highest Number of Prescriptions in Louisiana PMP by Generic Name Calendar Year 2017			
Controlled Substance/ Generic Name	**Drug Type**	**Number of Prescriptions**	**Percent of Total**
Hydrocodone/Acetaminophen	Opioid	2,187,230	18.3%
Alprazolam	Benzodiazepine	1,044,946	8.8%
Dextroamphetamine	Amphetamine	991,238	8.3%
Tramadol	Opioid	941,210	7.9%
Oxycodone/Acetaminophen	Opioid	692,401	5.8%
Zolpidem	Sedative	680,059	5.7%
Clonazepam	Benzodiazepine	625,787	5.2%
Lisdexamfetamine Dimesylate	Amphetamine	465,168	3.9%
Lorazepam	Benzodiazepine	350,311	2.9%
Methylphenidate	Respiratory And CNS Stimulant	302,935	2.5%
Diazepam	Benzodiazepine	291,197	2.5%
Phentermine	Amphetamine Derivative	238,594	2.0%
Oxycodone	Opioid	233,479	2.0%
Other Controlled Substances		2,889,764	24.2%
Total Prescriptions		**11,934,319**	**100%**
Source: Prepared by legislative auditor's staff using information from LABP's presentation to the PMP Advisory Council on January 10, 2018.			

APPENDIX D: OPIOID PRESCRIPTIONS BY PARISH

The exhibit below details the number of opioid prescriptions, by parish, during calendar years 2013 through 2017, as provided by LABP. The exhibit also calculates each parish's prescription frequency per 100 persons based on 2016 U.S. Census estimates and 2016 prescription counts, in decreasing frequency. Statewide, Louisiana averaged 98.1 prescriptions per 100 persons in 2016.

Opioid Prescriptions, by Parish, by Year
Calendar Years 2013 through 2017

Parish*	2013	2014	2015	2016	2017	Population, 2016**	Prescriptions per 100 Persons, 2016
Rapides	280,149	287,036	287,625	274,948	263,012	132,424	207.63
Caddo	458,122	476,627	480,669	466,366	442,406	248,851	187.41
Evangeline	59,089	57,539	56,108	54,443	49,603	33,709	161.51
Lafayette	426,604	419,433	400,201	389,094	360,691	241,398	161.18
East Baton Rouge	738,580	707,138	689,105	682,084	640,243	447,037	152.58
Jefferson	672,039	676,685	665,600	659,284	612,086	436,523	151.03
St. Tammany	400,654	382,071	364,235	357,663	340,601	253,602	141.03
Ouachita	215,000	220,139	208,841	207,746	203,754	156,983	132.34
St. Landry	112,756	110,815	104,644	109,424	109,055	83,883	130.45
Terrebonne	159,190	143,787	137,086	138,092	129,674	113,220	121.97
Richland	22,527	22,415	22,219	24,156	27,504	20,430	118.24
La Salle	23,276	23,112	19,952	17,210	15,389	15,052	114.34
Calcasieu	244,522	254,473	233,801	228,494	208,028	200,601	113.90
Claiborne	21,653	19,189	17,460	18,300	19,132	16,132	113.44
East Carroll	7,877	6,998	6,620	7,676	6,796	7,271	105.57
Orleans	412,045	389,974	383,703	379,570	322,975	391,495	96.95
Franklin	21,371	21,202	18,619	19,156	17,697	20,330	94.23
St. John the Baptist	30,704	29,361	34,740	39,965	40,520	43,631	91.60
Lincoln	42,605	42,526	42,793	42,802	35,169	47,745	89.65
Iberia	81,226	77,215	65,063	65,612	63,414	73,273	89.54
St. James	16,046	19,666	20,098	19,015	19,946	21,557	88.21
Tangipahoa	92,225	100,470	105,045	113,202	108,562	130,710	86.61
Red River	16,546	13,671	6,133	7,389	6,448	8,550	86.42
Bossier	89,743	97,029	100,256	108,517	114,781	126,057	86.09
Jefferson Davis	26,447	27,515	28,636	26,669	25,406	31,413	84.90

Opioid Prescriptions, by Parish, by Year Calendar Years 2013 through 2017							
Parish*	**2013**	**2014**	**2015**	**2016**	**2017**	**Population, 2016****	**Prescriptions per 100 Persons, 2016**
Lafourche	90,773	94,849	84,954	82,107	78,253	98,305	83.52
Webster	37,754	40,397	34,201	31,285	28,739	39,710	78.78
Avoyelles	32,599	33,698	29,604	30,602	27,581	41,117	74.43
Concordia	16,391	15,678	12,855	14,794	18,329	19,920	74.27
Natchitoches	37,709	31,311	28,494	27,682	29,239	39,162	70.69
Morehouse	24,097	24,984	20,154	18,304	17,040	26,071	70.21
Caldwell	8,827	7,935	7,509	7,010	6,564	10,087	69.50
East Feliciana	14,551	14,830	12,706	12,841	12,565	19,683	65.24
St. Mary	38,907	39,863	35,564	33,739	30,492	52,093	64.77
Jackson	12,193	13,418	14,124	10,202	9,639	15,808	64.54
Vernon	30,528	28,262	28,471	30,544	27,418	50,569	60.40
Ascension	72,412	74,162	68,953	71,310	68,507	121,587	58.65
Winn	10,880	10,662	7,887	7,927	8,050	14,376	55.14
St. Helena	3,890	3,617	4,111	5,183	5,580	10,512	49.31
St. Bernard	29,391	30,735	31,156	22,017	19,549	45,688	48.19
West Feliciana	4,952	7,965	8,435	7,304	7,017	15,344	47.60
Union	11,202	10,827	10,285	10,329	10,478	22,487	45.93
Plaquemines	12,399	8,016	9,378	10,575	10,055	23,464	45.07
Acadia	28,482	30,921	27,372	26,961	26,176	62,645	43.04
Washington	21,176	19,640	16,553	19,843	22,189	46,310	42.85
Madison	6,590	6,209	4,743	4,842	4,805	11,528	42.00
West Carroll	4,128	3,642	3,956	4,578	3,720	11,114	41.19
Pointe Coupee	9,739	8,735	8,172	9,126	8,185	22,159	41.18
Vermilion	27,846	27,556	25,329	24,726	22,098	60,205	41.07
Allen	14,615	13,058	9,172	9,641	10,454	25,684	37.54
Beauregard	17,105	14,278	13,925	13,593	15,159	36,927	36.81
St. Martin	22,059	23,259	18,646	18,677	16,863	54,007	34.58
Iberville	12,496	12,361	11,235	11,245	9,848	32,920	34.16
DeSoto	8,495	10,404	8,159	8,350	8,184	27,149	30.76
West Baton Rouge	7,040	7,893	7,437	7,626	7,102	25,795	29.56
Cameron	1,474	1,754	1,307	2,012	1,579	6,882	29.24
Catahoula	4,423	4,098	3,070	2,775	1,647	9,921	27.97
Sabine	10,673	8,839	5,753	6,662	6,796	23,977	27.79
St. Charles	19,432	18,439	15,423	13,758	9,533	52,923	26.00
Livingston	32,780	33,887	30,711	28,312	26,290	140,138	20.20
Assumption	4,437	4,621	3,807	3,485	3,051	22,695	15.36

Opioid Prescriptions, by Parish, by Year Calendar Years 2013 through 2017							
Parish*	**2013**	**2014**	**2015**	**2016**	**2017**	**Population, 2016****	**Prescriptions per 100 Persons, 2016**
Tensas	291	680	522	692	1,192	4,597	15.05
Bienville	832	898	1,014	1,737	2,775	13,865	12.53
Grant	857	2,200	1,766	1,370	2,998	22,365	6.13

*Parish is based on prescriber address.
****Population estimates as of July 1, 2016.
Source: Prepared by legislative auditor's Staff using data provided by LABP and the U.S. Census Bureau, Population Division.

APPENDIX E: PMP METRICS

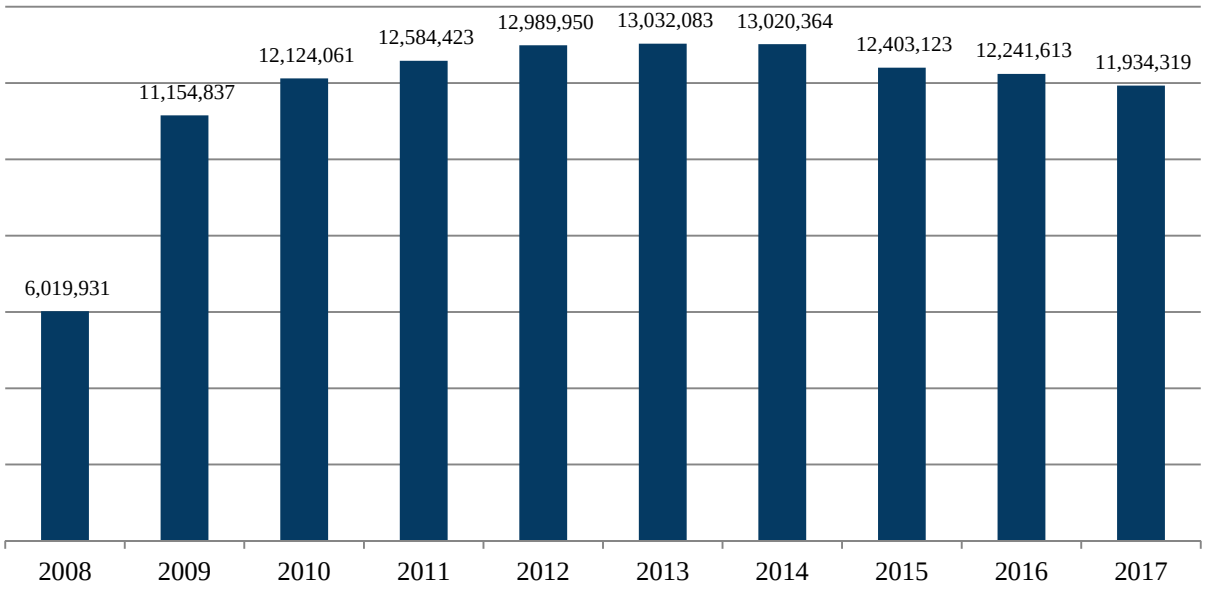
The following exhibits contain additional metrics on prescription monitoring information as prepared by LABP, including the number of registered users of the PMP as of December 31, 2017, the number of prescriptions reported to the PMP from calendar years 2008 through 2017, and the number of searches of the PMP from calendar years 2009 through 2017.

PMP Users
As of December 31, 2017

Provider Type	Providers Eligible for PMP Access	Providers Approved for PMP Access
Physician (MD, DO)	12,581	6,107
Nurse Practitioner (APRN)	2,816	1,774
Dentist (DDS)	2,144	1,088
Physician Assistant (PA)	736	336
Optometrist (OD)	344	22
Podiatrist (DPM)	154	56
Medical Psychologist (MP)	91	67
Prescriber's Delegate	NA	1,695
Pharmacist (PST)	8,809	3,922
Pharmacist's Delegate	NA	617
Total	**27,675**	**15,684**

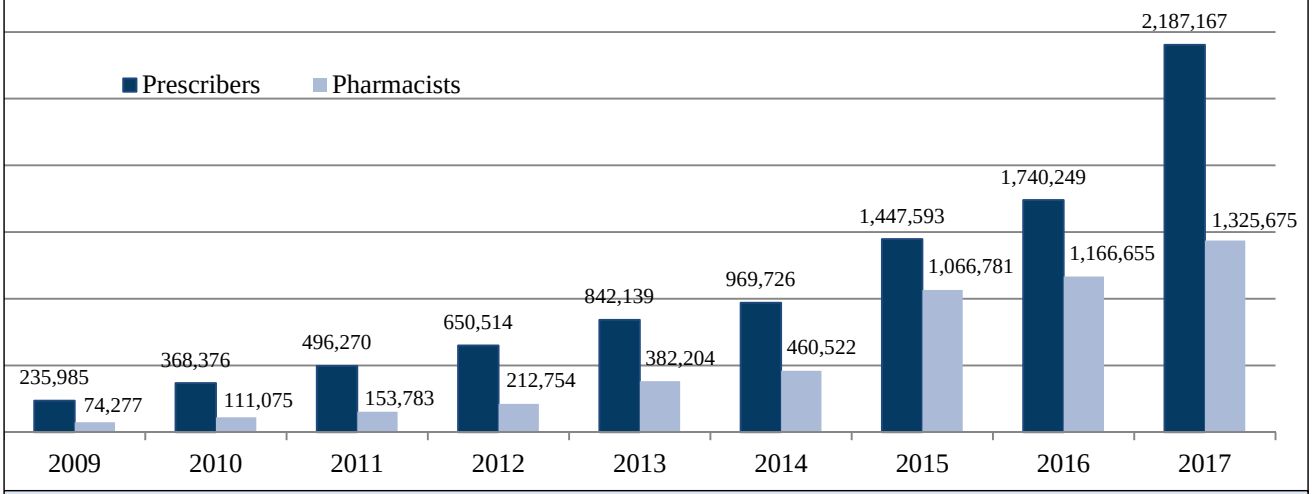
Note: R.S. 40:973 requires prescribers to be automatically registered as a participant in the PMP as of June 12, 2017; however, according to LABP, not all prescribers have completed the initial identity verification required to protect confidential prescription information.
Source: Created by legislative auditor's staff using information provided by LABP.

Number of Prescriptions Reported to the Louisiana PMP, by Year
Calendar Years 2008 through 2017



Source: Created by legislative auditor's staff using information provided by LABP.

PMP Searches by Prescribers and Pharmacists*
Calendar Years 2009 through 2017



***Includes delegates of pharmacists and prescribers as well as searches through AWARxE and the PMP Gateway. The increase in searches during calendar year 2017 is likely due to prescriber auto-registration legislation that became effective during calendar year 2017.
Source: Created by legislative auditor's staff using information provided by LABP.

APPENDIX F: PMP BEST PRACTICES AND STATUS OF LABP's IMPLEMENTATION

In Louisiana, LABP has implemented most of the components of a strong PMP statute recommended by the National Alliance for Model State Drug Laws "Components of a Strong Prescription Monitoring Program" (2015), as indicated below:

- **Drugs monitored** – LABP monitors controlled substances and drugs of concern that are identified as demonstrating a potential for abuse.

- **Prescriber mandates** – LABP requires prescribers or their designee to search the PMP prior to issuing certain prescriptions.

- **Interstate sharing** – LABP shares PMP data with 18 other states, including all bordering states.

- **PMP Advisory Council** – A PMP Advisory Council was established in 2009 and is comprised of representatives of 24 State organizations including licensing agencies for the prescribers and dispensers, professional organizations for the prescribers and dispensers, organizations representing Federal, State, and local law enforcement agencies, and representatives from the legislature. The Advisory Council meets regularly to provide guidance on the program.

- **Required registration** – Louisiana requires all prescribers with a U.S. Drug Enforcement Administration registration number, excluding veterinarians, to register with the PMP. LABP has recently implemented an automatic registration process in accordance with legislation passed during the 2017 legislative session.

- **Disclosure of de-identified information** – LABP provides de-identified data for statistical, public research, public policy, or educational purposes.

- **Authorized recipients** – In addition to prescribers and dispensers, LABP allows others to request specific PMP information if the use of the information will enhance patient safety or patient care. For example, law enforcement, professional licensing or certification boards, and patients can request PMP information.

- **Delegate access** – Prescribers and dispensers can designate an individual to act as an agent for the purposes of submitting information to or obtaining data from the PMP.

- **Standards, procedures, and confidentiality** – LABP has established standards and procedures for access to and use of PMP data and for maintaining confidentiality of the PMP data.

In addition, LABP has implemented or is planning to implement best practices to improve the PMP including:

- **Funding** – The Louisiana PMP is funded through self-generated revenues collected by LABP including a $25 annual fee tied to a pharmacy permit or a Controlled Dangerous Substance license.

- **Integration with Electronic Health Records** – Through Appriss Gateway, the PMP is connected to Electronic Health Records which helps automate the search for a patients PMP history. Ocshner and Kroger Pharmacies have implemented integration.

- **Prescriber report cards** – LABP is considering implementing prescriber report cards which would provide doctors with details about their prescribing habits based on information reported to the PMP. For example, the number of opioid prescriptions written compared to other doctors in the same specialty.

- **Expanded PMP data access to the Louisiana Department of Health (LDH)** – LABP currently shares de-identified data with LDH for research purposes. LABP is considering expanding LDH's access which would allow an epidemiologist to more thoroughly analyze the data.