BJA
Bureau of Justice Assistance
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PDMP◆TTAC
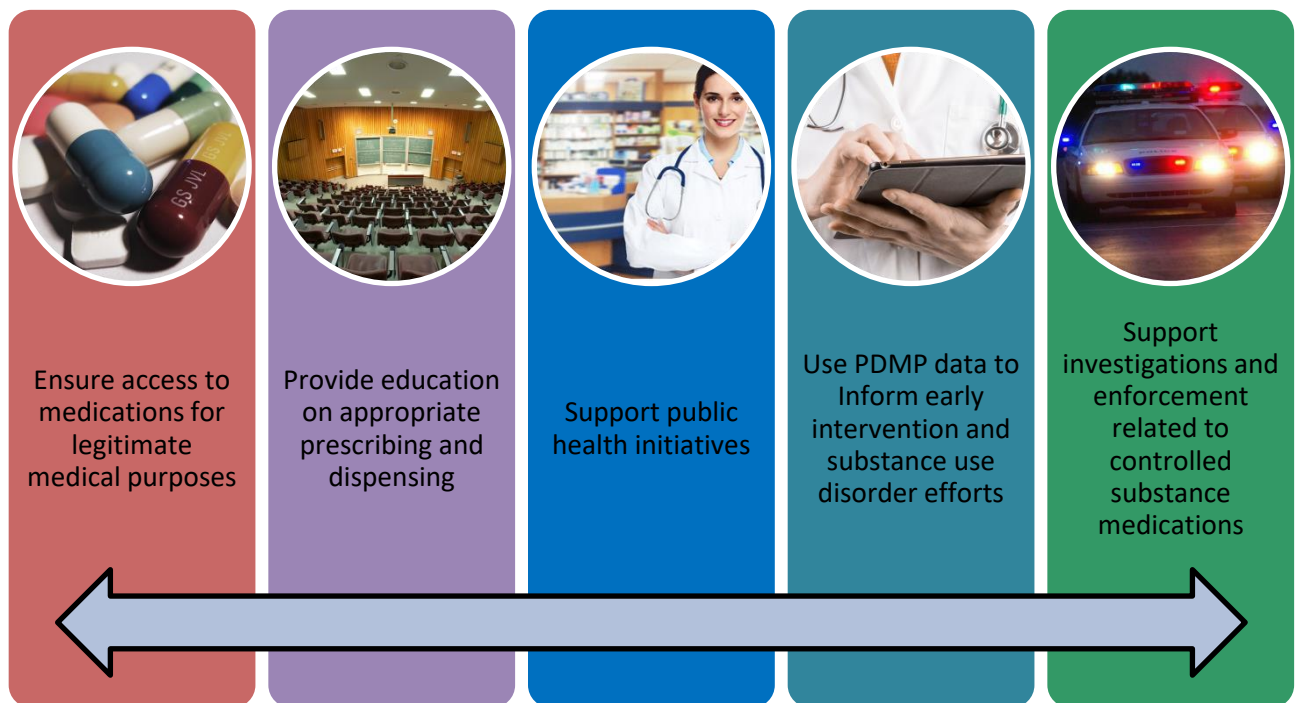Prescription Drug Monitoring Program Training and Technical Assistance Center

Prescription Drug Monitoring Program

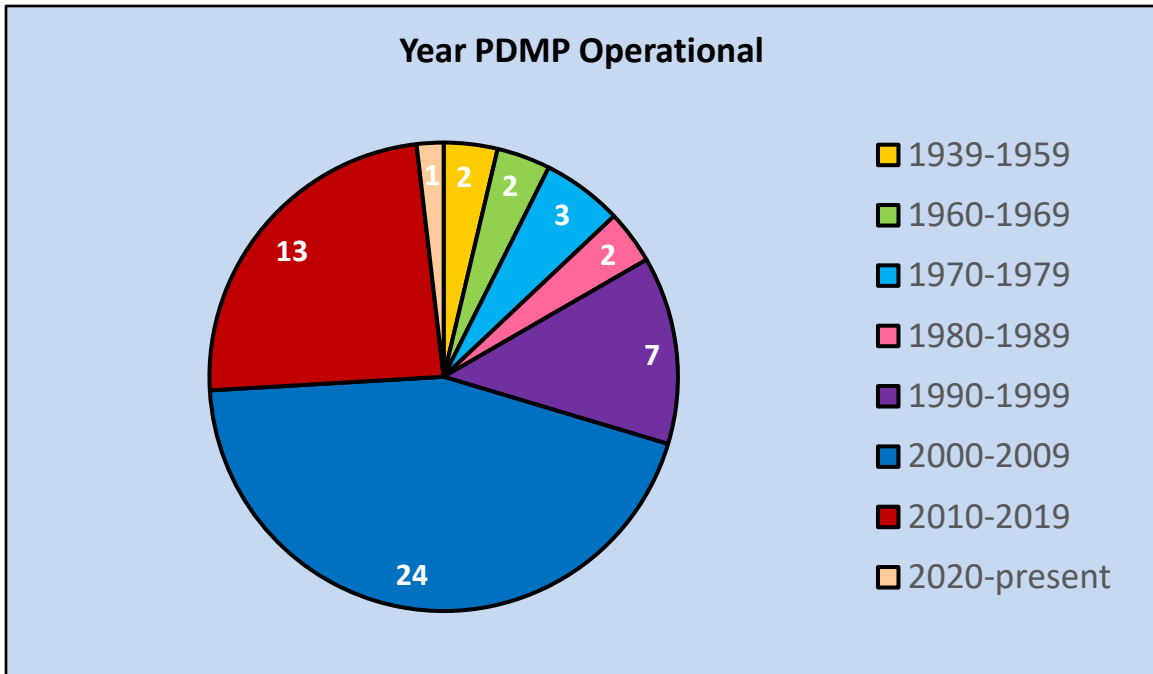# Overview of Prescription Drug Monitoring Programs (PDMPs)

February 2023

This document provides a general overview of how prescription drug monitoring programs (PDMPs) operate. PDMPs are designed to facilitate the collection, analysis, and reporting of information on the prescribing, dispensing, and use of prescription drugs within a state, commonwealth, district, or territory. A primary objective of PDMPs is to uphold both the laws ensuring access to appropriate pharmaceutical care by citizens and the laws deterring prescription drug diversion. It is important to know that PDMPs are individual programs, implemented to address their jurisdictions' prescription situations. There are variations within each PDMP, and the information offered is at a high level. The PDMP Training and Technical Assistance Center (TTAC), with support from the Bureau of Justice Assistance (BJA), has been conducting annual assessments to keep abreast of the current policies and capabilities of all the PDMPs. The information has been compiled into a business intelligence graphic, and detailed PDMP profiles are available on the TTAC website.

Every PDMP has the same overarching goals:

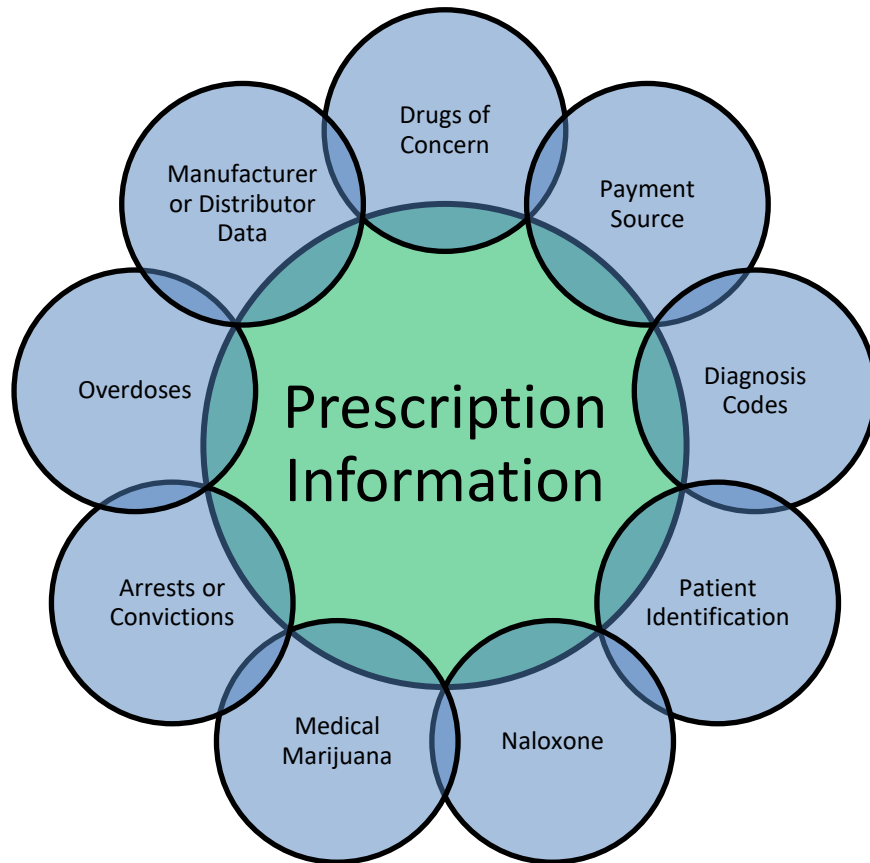| Ensure access to medications for legitimate medical purposes | Provide education on appropriate prescribing and dispensing | Support public health initiatives | Use PDMP data to Inform early intervention and substance use disorder efforts | Support investigations and enforcement related to controlled substance medications |

The proven success of the original PDMPs, and the availability of federal BJA grant funds to implement new PDMPs and enhance existing ones, led to the establishment of PDMPs across the United States. Thirty-eight new PDMPs have been established just since the turn of the century. Building on the experience and knowledge of the earlier programs, the more recent PDMPs have been implemented faster and have employed and established proven best practices; some have broken new ground themselves in bringing PDMPs to their full potential.

Year PDMP Operational

■	1939-1959
■	1960-1969
■	1970-1979
■	1980-1989
■	1990-1999
■	2000-2009
■	2010-2019
■	2020-present

Pie chart values: 1, 2, 2, 3, 2, 7, 24, 13

Data Collected by PDMPs

PDMPs continue to evolve into one of the most efficient and effective tools in the battle to reduce prescription drug misuse and diversion. PDMPs are constantly improving and being more responsive to stakeholders with more relevant, timely, and accurate information. PDMPs are widely recognized as an important tool in addressing the drug abuse epidemic. PDMP systems maintain a variety of information. The data collected by all the PDMPs is very similar across the country, with some PDMPs having additional information. Every PDMP receives data on controlled substance prescriptions. Most PDMPs track Schedules II through V; however, some only track Schedules II through IV.

Drugs of Concern · Payment Source · Diagnosis Codes · Patient Identification · Naloxone · Medical Marijuana · Arrests or Convictions · Overdoses · Manufacturer or Distributor Data · Prescription Information

PDMPs are now tracking information from all prescriptions, not just controlled substance medications. Most PDMPs have the authority to track drugs of concern. Drugs of concern are medications that are not controlled substances but the state, territory, district, or commonwealth has determined that these medications are being misused or abused. Designating a drug of concern is typically accomplished through the promulgation of administrative rules. Examples include gabapentin or butalbital. Additional data fields that may be tracked include the source of payment for the prescription: cash, commercial insurance, Medicare, or Medicaid. In addition, some PDMPs are collecting the international classification of diseases (ICD) 10 codes, which identify a disease or diagnosis. A patient's identification is captured by most PDMPs, such as the patient's driver's license, identification card, or some other form of government-issued identification. PDMPs may also track the identification of the person who drops off the prescription or who picks up the

medication from the pharmacy if that person is not the patient to whom the prescription was issued. In recent years, many PDMPs received data from alternate sources, such as naloxone administrations or dispensations from first responders, information from medical marijuana dispensaries, drug-related arrest or conviction data, reports of fatal and nonfatal drug overdoses, and reports from pharmaceutical drug manufacturers and distributors on quantities of controlled substance medications sent to dispensers.

Even though there are variations across the country in the data elements transmitted, every PDMP requires a core set of fields. Every PDMP captures data identifying the patient, such as the patient's name, address, date of birth, and gender. The prescribers' and dispensers' identifiers are also captured, typically through a cross-reference by their U.S. Drug Enforcement Administration-controlled substance registration number. Lastly, there is information about the medication dispensed: the medication's name; form, such as tablet, injectable, or powder; strength and quantity of the medication; date dispensed; and the number of days supplied. The specific data elements housed within the PDMP are established by statute or regulation.

PDMP Traits

PDMPs have various features, policies, and capabilities in addition to their collecting and tracking of prescription data. First, PDMPs are housed within different agencies across the country. The majority are with health departments or pharmacy boards, but there are some within law enforcement agencies, professional license agencies, and substance abuse agencies.

Every PDMP has a specific time frame requiring the prescription data to be reported to the PDMP. The majority of PDMPs require the data to be sent within 1 business day, but others require a slightly longer or shorter time frame. Regardless of the requirement, the data transmitters are permitted to send the data at a shorter time frame if they choose. The typical data file is sent to the PDMP and a batch file every night.

Data retention refers to the length of time a PDMP keeps the collected prescription data. This retention is set by the PDMP's housing agency through statute or regulation and can be from 1 year to indefinitely; a 5-year retention is the most common. PDMPs are required to purge the information at the end of the

retention; however, some maintain non-patient identifying information for statistical purposes.

To encourage health care providers to access and use the PDMPs, many PDMPs have mandatory enrollment or mandatory use laws in place. Mandatory enrollment is simply a requirement for health care practitioners to obtain a PDMP account. Mandatory use is a requirement for health care practitioners to query the PDMP under certain circumstances, such as prior to prescribing an opioid or the first time treating a patient. The criteria for the mandates vary across the country; a listing of the mandates and criteria are available on the TTAC website.

In addition to being a tool for health care providers, PDMPs are also used as a resource for law enforcement when investigating prescription drug-related crimes. Depending on the PDMP, law enforcement must either have an official document, such as a court order, search warrant, or subpoena, or show proof of an active investigation or probable cause.

Although the prescription data alone has proved to be extremely useful for health care providers, many PDMPs perform different data types of analytics to help summarize and inform the providers about their patients' prescription histories. The PDMP data fields can easily be analyzed based on geographic location, types of medications, dispensed medication combinations, overdose risk, and indicators of suspicious activity. The analytics are graphically displayed on a PDMP report.

PDMPs recognized in the early 2000s that there was a need for health care providers to be able to obtain a patient's prescription history across jurisdictional borderlines. Patients may seek care from providers in another state, or in some instances, people engaged in criminal activity may attempt to illegally obtain prescriptions in multiple states. PDMPs and BJA developed the technology to enable interstate data sharing. This technology allows an authorized user in one state to query the prescription records in multiple states. PDMPs are connected to a "hub" that securely transmits the request to another state, and the prescription data and the response is securely transmitted back to the requester. Although the technology is capable of connecting all the PDMPs to one another, many PDMPs have elected to share data with just their border states.

A common concern from health care providers is that the PDMP is a distinct system from their health record system. The provider must log in to a separate system to

obtain the PDMP prescription records. To rectify that, PDMPs employed technology to integrate the data from the two systems through a single sign-on. PDMPs are working diligently to expand integration with health information exchanges, electronic health records, and pharmacy dispensing systems.

PDMP System Overview

The process to get prescription information from the medication dispenser, such as a pharmacy or health care provider, to the PDMP has been greatly facilitated with advancements in technology. Instead of paper prescriptions being sent to the PDMP for manual data entry, as was the case back in the 1980s and 1990s, today's prescription data is electronically transmitted. The graphic below shows that the prescription information is sent from the dispenser to the PDMP. The PDMP performs a series of data quality procedures to help ensure that the transmitted data is complete and accurate. Once the process is completed, the prescription data is accessible by authorized users under certain conditions established by statute or regulation.
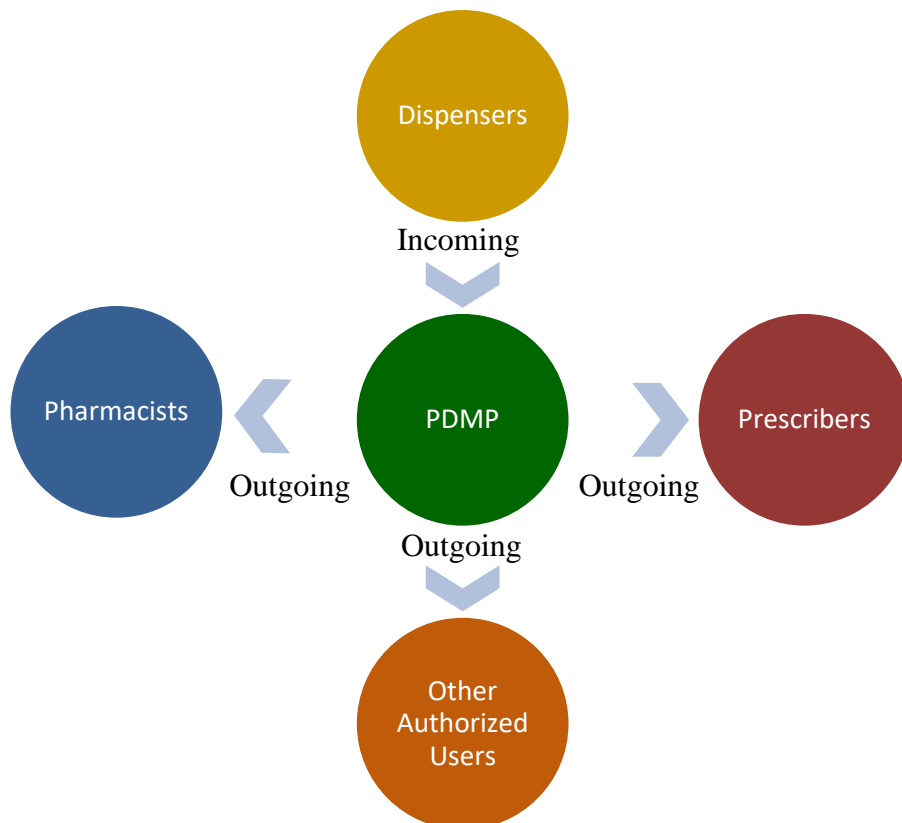
Types of PDMP Reports

PDMPs can generate a variety of reports for their authorized users. The typical reports have the prescription information showing a chronological listing of the prescriptions by the patient prescriber or pharmacy. PDMP reports fall into two main types, solicited and unsolicited. Solicited reports are generated when an authorized user makes a request to the PDMP. Every PDMP is engaged in sending solicited reports. Unsolicited reports or push notifications are generated by the PDMP based on select criteria and sent to the appropriate authorized user. For example, a PDMP may create an unsolicited report on a patient who may be engaged in doctor shopping. Doctor shopping, or multiple provider episodes, is a term that describes the activity when a person is obtaining multiple prescriptions from multiple prescribers during the same time frame. The PDMP will send the unsolicited report to that patient's health care providers and possibly law enforcement. The report is provided to the health care providers to discuss with the patient as they determine appropriate medical care. For law enforcement, it is preliminary information to investigate potential criminal activity. The reports are not proof that the person is engaged in any wrongdoing.

A generic sample report with fictitious data is displayed on the next page. The report contains a chronological listing of the prescriptions issued to the patient as well as the information on the prescriber, dispenser, and medication. At the top of this sample report, there are four boxes: a patient's calculated morphine milligram equivalent received during a 30-day time frame, which can show the potential overdose risk; incidents of possible drug-seeking behavior with multiple provider episodes; and risk associated with overlapping prescriptions. The last box is an overall risk score based on all analytics performed. PDMPs provide detailed explanations of the report's features to the recipients. This is a sample of a PDMP report. There are variations among the PDMPs, but most follow a similar report template.

66.04	MME Assessment * 30-day average	8 Dr 5 Rx	Multiple Provider Episodes * Last 6 months	4	Overlapping Prescriptions * Last 45 Days	5	Risk Score Max Score=7

Patient Last Name	First Name	Middle Name	Date of Birth	Gender	Address
Doe	John	Robert	1/1/1976	M	123 Main Street, Anytown, CA 90212

Prescriber	Dispenser	Date Issued	Date Filled	Date Sold	Rx Number	Drug	Strength	Qty	Days	Refills
Welby, Marcus MD 3355 Doctor Street, Anytown, CA 90212 AW12121212	Test Pharmacy 8833 Patch Drive, Anytown, CA 90212 BT12121212	2/3/2022	2/3/2022	2/4/2022	12225	Alprazolam	1 MG	90	30	1
Howser, Doogie DO 8233 Pilladay Avenue, Place, CA 90213 BH98989898	Hometown Pharmacy 1122 Main Street, Place, CA 90213 AH23232323	2/5/2022	2/5/2022	2/6/2022	37921	Hydrocodone	7.5 MG	180	30	1
House, Gregory MD 5558 Hospital Road, My Town, CA 90211 AH77776622	Made-up Drug Store 4466 Nurse Way, My Town, CA 90211 BM34343434	2/7/2022	2/7/2022	2/8/2022	897754	Morphine Sulfate	30 MG	14	14	0
Potter, Sherman MD 9911 Splint Circle, Village, CA 90210 AP 44488891	City Pharmacy 7312 Wounded Road, Village, CA 90210 AC 45454545	2/9/2022	2/9/2022	2/10/2022	534502	Methylphenidate	10 MG	90	30	0
Welby, Marcus MD 3355 Doctor Street, Anytown, CA 90212 AW12121212	Test Pharmacy 8833 Patch Drive, Anytown, CA 90212 BT12121212	3/3/2022	3/3/2022	3/4/2022	13100	Alprazolam	1 MG	90	30	1
Howser, Doogie DO 8233 Pilladay Avenue, Place, CA 90213 BH98989898	Hometown Pharmacy 1122 Main Street, Place, CA 90213 AH23232323	3/5/2022	3/5/2022	3/6/2022	39572	Hydrocodone	7.5 MG	180	30	1
Potter, Sherman MD 9911 Splint Circle, Village, CA 90210 AP 44488891	City Pharmacy 7312 Wounded Road, Village, CA 90210 AC 45454545	3/9/2022	3/9/2022	3/10/2022	550987	Methylphenidate	10 MG	90	30	0

In addition to the patient profile report, most PDMPs have the ability to generate specialty reports:

- Statistical reports
- Drug trend reports
- Geographic analysis
- Analysis on medications dispensed to determine whether the patient is at risk for overdose
- Prescriber report cards, which compare one prescriber's prescribing habits to others within their geographic area or specialty

PDMP Report Recipients

The earliest PDMP only allowed access to the data by the regulatory boards and law enforcement. Subsequently, access was expanded to the health care providers. Below are the common entities who are authorized to access and receive PDMP data. The authorized users for each PDMP are detailed within the individual PDMP profile reports on the TTAC [website](#).

- Health Profession Licensing Board
- Law Enforcement
- Doctors and Other Prescribers
- Pharmacies and Other Dispensers
- Medical Examiners/Coroners
- Medicaid/Medicare
- Prosecutorial Authorities
- Drug Courts

Utility of PDMP Information

The usefulness of the PDMP reports varies with the user type. For health care providers obtaining a prescription history on one of their patients, they may try to identify instances of misuse or addiction, multiple prescribers or dispensers, drug interactions or other potential harm with the medication regimen, or compliance with pain contracts, or they may just monitor the patient's compliance with the prescription directions. If they obtain one of their own prescribing or dispensing history reports, they could identify the instance of potential fraudulent prescriptions under their registration numbers or identify errors within the data that has been reported to the PDMP. Law enforcement uses the PDMP information to identify possible violations of the Controlled Substance Act, such as unlawful sale of controlled substances, unlawful sale of prescriptions, unlawful prescribing or

dispensing, organized forgery rings, or doctor-shopper rings. State licensing and regulatory boards can use the PDMP information to verify that their licensees are following patient treatment standards. The information obtained can be used to improve prescribing and dispensing of controlled substances. State regulatory boards can use the information to verify that a licensee is in compliance with any board action, confirm that a licensee is reporting to the PDMP as required by law, or just as a starting point for their investigation originating from a complaint about a licensee. PDMP information can be used in some jurisdictions by court officials. Drug courts can use the information to monitor a participant's prescription use in compliance with the medication regimen. Prosecutors can use the information to assist with their cases on controlled substance law violations involving health care providers, patients, medical facilities, and drug manufacturers or distributors. Also, the PDMP report could reveal additional evidence by one of those entities. Probation and parole officers can use the information to monitor a probationer's or parolee's prescription use in compliance with the medication regimen.

PDMP information can be used in additional ways by other authorized entities. Medical examiners or coroners can use the information to assist in identifying the cause of death in a drug overdose case. Public health officials can use the PDMP information to further their work in prescription drug research, prescription misuse and abuse treatment and prevention, and education. Impaired professional programs can use the information to monitor compliance of their clients. Medicaid and Medicare officials can use the information with drug utilization review boards, to identify instances when one of their clients is obtaining prescription medications outside the Medicaid/Medicare payment structure, and to monitor clients who are restricted to engaging a single practitioner or pharmacy.

The effectiveness of PDMPs and the role they are playing in reducing drug abuse and diversion is very evident. What originally started as embattled and fragile programs among a small number of states has grown into one of the most effective resource tools in the fight against prescription drug abuse and diversion. The future of PDMPs is on solid ground, and the full impact and benefit of these programs is being realized.