Bureau of Justice Assistance (BJA)
Comprehensive Opioid, Stimulant, and Substance Abuse Program (COSSAP)

PDMP Policies and Capabilities:
2022 Assessment Results

Prescription drug monitoring programs (PDMPs) are designed to facilitate the collection, analysis, and reporting of information on the prescribing, dispensing, and use of prescription drugs within a state, district, commonwealth, or territory (SDCT). An overriding goal of PDMPs is to uphold both the SDCT laws ensuring access to appropriate pharmaceutical care by citizens and the SDCT laws deterring diversion. The earliest PDMPs were established primarily as enforcement and regulatory tools providing data to officials responsible for enforcing drug laws and overseeing the prescribing and dispensing of these drugs by health care professionals. While this role continues in almost all current PDMPs, the focus of PDMPs has shifted to enhance patient care and assist in developing drug abuse prevention and treatment strategies.

Since 2010, the PDMP Training and Technical Assistance Center (TTAC), at the Institute for Intergovernmental Research (IIR), with support from the Bureau of Justice Assistance, has conducted nine assessments of PDMPs. The assessments have gathered data on PDMP statutes, regulations, policies, and procedures; tracked their changes over time; and identified program trends and candidate best practices. As more PDMPs have been implemented and new laws and practices instituted, the TTAC assessments have evolved to capture changes and new practices and to identify trends (see Appendix A for a listing of the 2022 assessment questions). Every PDMP administrator was invited to complete the 2022 assessment, with 49 of the 54 PDMPs providing responses. The results were compiled into individual, comprehensive PDMP reports and posted on the TTAC website.

Historically, as new PDMPs have been implemented, they have adopted the proven practices and policies of established PDMPs, utilized the latest technology, and addressed the needs of a wider group of stakeholders. Comparing the 2022 information provided by PDMPs with information from previous assessments, it is evident that PDMPs continue to evolve and are becoming more homogeneous. TTAC has developed an interactive Power BI visualization, which allows website visitors to compare changes over time.

This document summarizes the status of PDMPs, based on the results of the 2022 assessment, related to operations, policies/procedures, technological capabilities, and substance use disorder (SUD) activities.
General PDMP Information

Status of PDMPs

There are 54 operational PDMPs in the United States (50 states; the District of Columbia; and three U.S. territories—Guam, the Northern Mariana Islands, and Puerto Rico). The first PDMP was established in 1918, in New York, to monitor prescriptions for cocaine, codeine, heroin, morphine, and opium. This program ceased operations in 1921. California was the next state to enact legislation for a PDMP in 1939; it has the distinction of being the oldest, continuously operational PDMP. Between 1939 and 1999, there were 16 PDMPs; 24 were added from 2000 through 2009, and 14 have been added since then.

Two-Factor Authentication

Secure access to prescription data maintained by a PDMP is a high priority. Access is obtained via a unique username and password. An enhanced level of security that is becoming more prevalent is two-factor authentication. Two-factor authentication requires a user to provide an additional authenticator after entering their username and password. The additional authenticator commonly falls into one of the following categories:

- **Something you know**—Personal Identification Number (PIN), password, or response to a secure question
- **Something you have**—credit card, smartphone, or hardware token
- **Something you are**—fingerprint, iris scan, or voice print

<table>
<thead>
<tr>
<th>Two-Factor Authentication</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required to use</td>
<td>7</td>
</tr>
<tr>
<td>Allowed to use</td>
<td>7</td>
</tr>
<tr>
<td>Not offered</td>
<td>35</td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
</tr>
</tbody>
</table>

Disaster Recovery Plan

PDMP information is made available to health care professionals as a tool for the appropriate medical treatment of patients. Uninterrupted access is critical to the delivery of that treatment. Even though reports of disruptions are infrequent, the potential causes are well-known: data hacking, natural disaster, or technological failures. Most PDMPs are addressing this issue in disaster recovery plans. Disaster recovery plans strive to help PDMPs resolve data or system functionality loss and return to operational status as quickly as possible. This year’s survey shows that 41 of the 49 responding PDMPs currently have disaster recovery plans in place.

Additional Information on PDMP Patient Reports

Historically, PDMPs have tracked and made available information from controlled substance prescriptions: prescriber and dispenser information, medication details (e.g., National Drug Code, drug strength, form, quantity), and patient information (e.g., name, date of birth, gender, address). In recent years, many PDMPs have enhanced the patient report with information from alternate data sources and summary analytics. The table below details the additional patient report elements.

<table>
<thead>
<tr>
<th>Additional PDMP Patient Report Elements</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug arrests or convictions</td>
<td>3</td>
</tr>
<tr>
<td>Drug combinations</td>
<td>39</td>
</tr>
<tr>
<td>Information about or a link to a mental health assessment tool</td>
<td>5</td>
</tr>
<tr>
<td>Information about or a link to SUD treatment options</td>
<td>19</td>
</tr>
<tr>
<td>Morphine milligram equivalents (MMEs)</td>
<td>49</td>
</tr>
<tr>
<td>Multiple provider episodes</td>
<td>41</td>
</tr>
<tr>
<td>Naloxone administrations</td>
<td>16</td>
</tr>
<tr>
<td>Naloxone dispensations</td>
<td>19</td>
</tr>
<tr>
<td>Fatal or nonfatal overdose incidents</td>
<td>7</td>
</tr>
<tr>
<td>Risk score or scale</td>
<td>26</td>
</tr>
</tbody>
</table>
Statistics Capabilities

Statistical data based on PDMP information is used to assist the PDMP in planning, resource allocation, and assessment of policies. In addition, the PDMP statistics can help inform health care strategies, prescription trends, impact on geographic areas or populations, and identification of potential “hot spots” within an SDCT. On this year’s survey, PDMP representatives were asked which general statistics were capable of being generated on a routine basis. Note: The processes and policies on requesting and release of statistical information can vary across the country.

<table>
<thead>
<tr>
<th>Prescription Statistics Available</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of prescriptions</td>
<td>50</td>
</tr>
<tr>
<td>Number of dosage units</td>
<td>48</td>
</tr>
<tr>
<td>Number of prescriptions by controlled substance schedule</td>
<td>48</td>
</tr>
<tr>
<td>Number of dosage units by controlled substance schedule</td>
<td>47</td>
</tr>
<tr>
<td>Number of prescriptions by drug classification</td>
<td>50</td>
</tr>
<tr>
<td>Number of dosage units by drug classification</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prescription Statistics Filters</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age or age range</td>
<td>43</td>
</tr>
<tr>
<td>Ethnicity or race</td>
<td>6</td>
</tr>
<tr>
<td>Gender identification</td>
<td>38</td>
</tr>
<tr>
<td>Geographic location of patient or practitioner</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registrant Statistics Available</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of authorized PDMP users enrolled</td>
<td>48</td>
</tr>
<tr>
<td>Number of authorized PDMP users enrolled by license/practice type</td>
<td>48</td>
</tr>
<tr>
<td>Number of registrants in SDCT</td>
<td>40</td>
</tr>
<tr>
<td>Number of registrants in SDCT by license/practice type</td>
<td>39</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PDMP Report Statistics Available</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of solicited patient reports delivered</td>
<td>48</td>
</tr>
<tr>
<td>Number of solicited prescriber reports delivered</td>
<td>44</td>
</tr>
<tr>
<td>Number of solicited dispenser reports delivered</td>
<td>41</td>
</tr>
<tr>
<td>Number of solicited patient reports delivered by requestor type</td>
<td>48</td>
</tr>
<tr>
<td>Number of solicited prescriber reports delivered by requestor type</td>
<td>43</td>
</tr>
<tr>
<td>Number of solicited dispenser reports delivered by requestor type</td>
<td>41</td>
</tr>
<tr>
<td>Number of unique requestors for solicited reports</td>
<td>44</td>
</tr>
<tr>
<td>Number of unique requestors for solicited reports by requestor type</td>
<td>44</td>
</tr>
<tr>
<td>Number of unsolicited patient reports/alerts delivered</td>
<td>35</td>
</tr>
<tr>
<td>Number of unsolicited prescriber reports/alerts delivered</td>
<td>30</td>
</tr>
<tr>
<td>Number of unsolicited dispenser reports/alerts delivered</td>
<td>27</td>
</tr>
<tr>
<td>Number of unsolicited patient reports/alerts delivered by recipient type</td>
<td>35</td>
</tr>
<tr>
<td>Number of unsolicited prescriber reports/alerts delivered by recipient type</td>
<td>30</td>
</tr>
<tr>
<td>Number of unsolicited dispenser reports/alerts delivered by recipient type</td>
<td>27</td>
</tr>
<tr>
<td>Number of unique recipients for unsolicited reports</td>
<td>31</td>
</tr>
<tr>
<td>Number of unique recipients for unsolicited reports by recipient type</td>
<td>31</td>
</tr>
</tbody>
</table>

Data Sharing

Interstate Data Sharing

PDMPs share information with prescribers and dispensers from other SDCTs to provide better and more complete information of a patient’s controlled substance prescription history. There are 53 PDMPs currently engaged in interstate data sharing. California is not currently engaged in interstate data sharing but will be before the end of the year. It is important to note that this does not mean that all PDMPs
are sharing with every other PDMP; in most cases, PDMPs are engaged in data sharing with their border states. An interactive map showing which PDMPs are engaged in interstate data sharing and with which SDTC partners is available on the TTAC website.

### Interstate Sharing Partners

<table>
<thead>
<tr>
<th>Number of Partners</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;50</td>
<td>0</td>
</tr>
<tr>
<td>41–50</td>
<td>7</td>
</tr>
<tr>
<td>31–40</td>
<td>25</td>
</tr>
<tr>
<td>21–30</td>
<td>8</td>
</tr>
<tr>
<td>11–20</td>
<td>9</td>
</tr>
<tr>
<td>1–10</td>
<td>4</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

### Interstate Sharing Border Partners

<table>
<thead>
<tr>
<th>Number of Border Partners</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>40</td>
</tr>
<tr>
<td>80–90%</td>
<td>5</td>
</tr>
<tr>
<td>60–75%</td>
<td>2</td>
</tr>
<tr>
<td>50%</td>
<td>1</td>
</tr>
<tr>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>n/a</td>
<td>5</td>
</tr>
</tbody>
</table>

### SUD Activities

The Substance Abuse and Mental Health Services Administration (SAMHSA) states that SUD occurs “when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home.” According to the Centers for Disease Control and Prevention’s Wonder Database, overdoses involving prescription medications showed a 1.05 percent decrease from 2016 to 2019 while those involving illicit substances showed a 29.68 percent increase during the same time. However, both categories of drugs showed a significant increase during the first year of the pandemic (2019 to 2020): 18.81 percent for prescription medications and 27.48 percent for illicit substances. Although PDMPs are primarily concerned with prescription medications, many are offering tools/resources and taking actions to address the problem for illicit substances as well.

### Available Tools/Resources

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication-assisted treatment</td>
<td>22</td>
</tr>
<tr>
<td>Medication for opioid use disorder</td>
<td>12</td>
</tr>
<tr>
<td>Harm reduction strategies</td>
<td>9</td>
</tr>
<tr>
<td>Mental health assistance</td>
<td>6</td>
</tr>
<tr>
<td>Employee assistance programs</td>
<td>2</td>
</tr>
</tbody>
</table>
Appendix A—2022 Assessment Questions

2022 Assessment (54 operational PDMPs, 49 responses received)

1. Name of person completing the survey.

2. Select the state, district, commonwealth, or territory of the PDMP represented in the survey responses.

3. Select which forms of identification or license numbers your PDMP allows for practitioners (e.g., prescribers, dispensers).
   - U.S. Drug Enforcement Administration controlled substance registration number
   - Licensing Board number
   - National Provider Identifier
   - NCPDP number
   - State controlled substance registration number

4. Select which of the following statements are accurate for PDMP user access:
   - PDMP users are required to use two-factor authentication.
   - PDMP users are allowed to use two-factor authentication.
   - PDMP users do not have the option for two-factor authentication.

5. Does your agency have a disaster recovery plan in place for the PDMP?

6. Select which of the following are included on or with a PDMP patient report:
   - Drug arrests or convictions
   - Drug combinations
   - Information about or a link to a mental health assessment tool
   - Information about or a link to substance use disorder treatment options
   - Morphine milligram equivalents
   - Multiple provider episodes

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Measuring PDMP Effectiveness

As mentioned, PDMPs were originally established as tools to reduce the diversion of controlled substance medications and expanded to assist health care providers in the treatment of patients. Metrics were developed to gauge the effectiveness of PDMPs, statutes and policies, and inform drug overdose and response. The table below is a listing of some of the metrics currently employed by the PDMPs.

## Actions Initiated

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocating resources to SUD-affected areas</td>
<td>6</td>
</tr>
<tr>
<td>Training on appropriate controlled substance prescribing</td>
<td>11</td>
</tr>
<tr>
<td>Distribution of prescription drug tool kits</td>
<td>1</td>
</tr>
<tr>
<td>Risk evaluation/analysis with PDMP reports</td>
<td>26</td>
</tr>
<tr>
<td>Referral to SUD organizations</td>
<td>3</td>
</tr>
<tr>
<td>Referral to overdose review teams</td>
<td>2</td>
</tr>
</tbody>
</table>

## Effectiveness Metrics

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of PDMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in MMEs prescribed or dispensed</td>
<td>26</td>
</tr>
<tr>
<td>Reduction in number of fatal or nonfatal overdoses</td>
<td>13</td>
</tr>
<tr>
<td>Reduction in incidence of fraudulent prescriptions</td>
<td>5</td>
</tr>
<tr>
<td>Reduction in incidence of multiple provider episodes</td>
<td>29</td>
</tr>
<tr>
<td>Reduction in number of opioid prescriptions issued</td>
<td>28</td>
</tr>
<tr>
<td>Reduction in number of opioid dosage units dispensed</td>
<td>22</td>
</tr>
<tr>
<td>Reduction in number of benzodiazepine prescriptions issued</td>
<td>20</td>
</tr>
<tr>
<td>Reduction in number of benzodiazepine dosage units dispensed</td>
<td>20</td>
</tr>
<tr>
<td>Reduction in number of stimulant prescriptions issued</td>
<td>16</td>
</tr>
<tr>
<td>Reduction in number of stimulant dosage units dispensed</td>
<td>16</td>
</tr>
</tbody>
</table>
- Naloxone administrations
- Naloxone dispensations
- Overdose incidents
- Risk score or scale

7. Select the prescription statistics that you are currently capable of generating on a routine basis.
   - Number of prescriptions
   - Number of dosage units
   - Number of prescriptions by controlled substance schedule
   - Number of dosage units by controlled substance schedule
   - Number of “drugs of concern” prescriptions
   - Number of “drugs of concern” dosage units
   - Number of prescriptions by drug classification
   - Number of dosage units by drug classification

8. Select the demographics for which you have the ability to filter the prescription statistics.
   - Age or age range
   - Ethnicity or race
   - Gender identification
   - Geographic location of patient or practitioner

9. Select the registrant statistics that you are currently capable of generating on a routine basis.
   - Number of authorized PDMP users enrolled
   - Number of authorized PDMP users enrolled by practice/license type
   - Number of registrants in your state, district, commonwealth, or territory
   - Number of registrants in your state, district, commonwealth, or territory by practice/license type

10. Select the PDMP report statistics that you are currently capable of generating on a routine basis.
    - Number of solicited patient reports delivered
    - Number of solicited prescriber reports delivered
    - Number of solicited dispenser reports delivered
    - Number of solicited patient reports delivered by requestor type
    - Number of solicited prescriber reports delivered by requestor type
    - Number of solicited dispenser reports delivered by requestor type
    - Number of unique requestors for solicited reports
    - Number of unique requestors for solicited reports by requestor type
    - Number of unsolicited patient reports/alerts delivered
    - Number of unsolicited prescriber reports/alerts delivered
    - Number of unsolicited dispenser reports/alerts delivered
    - Number of unsolicited patient reports/alerts delivered by recipient type
    - Number of unsolicited prescriber reports/alerts delivered by recipient type
    - Number of unsolicited dispenser reports/alerts delivered by recipient type
    - Number of unique recipients for unsolicited reports
    - Number of unique recipients for unsolicited reports by recipient type

11. Select which of the following resources your PDMP has available to assist in the analysis of PDMP data:
    - Data analyst
    - Epidemiologist
    - University researcher
    - Other
12. Select the state(s), district(s), commonwealth(s), and territory(ies) with which you are currently engaged in interstate data sharing and via which hub(s).

13. Is your state, district, commonwealth, or territory currently engaged in interstate data sharing with the Military Health Service PDMP?

14. Is your PDMP currently integrated with a health information exchange (HIE)?

15. Select the approximate percentage of state health care providers integrated with the HIE and via which hub(s).

16. Is the PDMP data allowed to be downloaded/ stored in the HIE?

17. Is the PDMP data allowed to be analyzed or summarized by the HIE?

18. Does your HIE integration incorporate interstate data?

19. Do you allow multistate HIE integrations?

20. Is your PDMP currently integrated with an electronic health record (EHR) system?

21. Select the approximate percentage of state health care providers integrated with the EHR and via which hub(s).

22. Is the PDMP data allowed to be downloaded/ stored in the EHR?

23. Is the PDMP data allowed to be analyzed or summarized by the EHR?

24. Does your EHR integration incorporate interstate data?

25. Do you allow multistate EHR integrations?

26. Is your PDMP currently integrated with a pharmacy dispensing system (PDS) or a pharmacy management system (PMS)?

27. Select the approximate percentage of state health care providers integrated with the PDS/ PMS and via which hub(s).

28. Is the PDMP data allowed to be downloaded/ stored in the PDS/PMS?

29. Is the PDMP data allowed to be analyzed or summarized by the PDS/PMS?

30. Does your PDS/PMS integration incorporate interstate data?

31. Do you allow multistate PDS/PMS integrations?

32. Are you using HL7 FHIR to exchange data with health care systems?

33. When will your PDMP be ready to exchange data with health care systems using HL7 FHIR?

34. What standard(s) are you using for integration currently?

35. Select the tools or resources that are available either on the public PDMP website or within the PDMP system to assist with linkage to care.
   - Medication-assisted treatment services
   - Medication for opioid use disorder services
   - Harm reduction strategies
   - Mental health assistance services
   - Employee assistance programs
   - Housing assistance programs
   - Reentry programs
   - Other

36. Select the drug overdose surveillance activities that the PDMP uses to gather data on the scope of overdoses.
   - Collect emergency department data on suspected drug overdoses.
   - Capture detailed drug overdose death information from death certificates, toxicology reports, or medical examiner/coroner reports.
37. List the data sources and systems for surveillance activities.

38. Based on your drug overdose surveillance activities identified above, select the action(s) that are initiated.
   - Allocating resources to areas affected by substance use disorder
   - Directed training on appropriate prescribing of controlled substances
   - Distribution of prescription drug tool kits for guidance and assistance
   - Inclusion of risk evaluation/analysis on or with the PDMP report
   - Referral to organizations that address substance use disorder (i.e., reentry programs, drug courts, mental health services)
   - Referral to overdose review teams for analysis and remediation
   - Other

39. Select the criteria being used to measure the effectiveness of your PDMP:
   - Reduction in morphine milligram equivalents prescribed or dispensed
   - Reduction in number of fatal or nonfatal overdoses
   - Reduction in incidence of fraudulent prescriptions
   - Reduction in incidence of multiple provider episodes
   - Reduction in number of opioid prescriptions issued
   - Reduction in number of opioid dosage units dispensed
   - Reduction in number of benzodiazepine prescriptions issued
   - Reduction in number of benzodiazepine dosage units dispensed
   - Reduction in number of stimulant prescriptions issued
   - Reduction in number of stimulant dosage units dispensed
   - Not applicable
   - Other

Questions?
Call (850) 481-7367, or email pdmpTTAC@iir.com.

Visit PDMP TTAC at www.pdmpassist.org.
Visit the COSSAP Resource Center at www.cossaphresources.org.

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