Prescription Drug Monitoring Programs: How Effective Are They?

3rd Annual Pharmacy Benefit Oversight and Compliance

Chicago
November 13, 2014
What are PDMPs?

• Maintain statewide electronic databases of prescriptions dispensed for controlled substances

• PDMP information can aid those in law enforcement and/or health care in identifying patterns of prescribing, dispensing, or receiving controlled substances that may indicate abuse
Information collected by PDMPs may be used to

• Support access to and legitimate medical use of controlled substances

• Identify or prevent drug abuse and diversion

• Facilitate the identification of prescription drug-addicted individuals and enable intervention and treatment

• Outline drug use and abuse trends to inform public health initiatives

• Educate individuals about prescription drug use, abuse, and diversion as well as about PDMPs
• Prescription Drug Monitoring Programs
  – Regulated at the state level which results in tremendous variation in programs
  – Approximately 20 states do not require dispensing physicians to submit reports
  – The NABP’s PMP Interconnect program has led the way in allowing for physicians in “border towns” to access PDMP’s in neighboring states
  – Significant gaps still exists for the following:
    • No PDMP in place yet for Missouri
    • Pharmacist access is limited to the “dispensing” pharmacist. Clinical pharmacists conducting drug reviews do not have access
    • Payers do not have access to use for fraud prevention
Program Operation

- Of the authorized PDMPs, nearly two-thirds are administered by either state pharmacy boards or health departments.

- Each state determines which entities dispensing prescriptions for controlled substances are required to submit data to the PDMP.

- Some states also have statutory authority to require out-of-state, mail order, and internet pharmacies to submit data to the PDMP regarding prescription or controlled drugs dispensed to residents of the state.

- State laws also indicate which schedules of controlled substances are monitored under each program, which information is submitted, the means by which dispensers submit the required information, and the reporting timeframe.
Access to a PDMP database is determined by state law and varies by state

- The majority of states allow pharmacists and practitioners to access information related to their patients
- Some also allow other entities to access the information under certain circumstances
  - Law enforcement, licensing and regulatory boards, state Medicaid Programs, state medical examiners, and research organization
- State laws outline the procedures by which information from the PDMP may be accessed
Why Do We Need PDMPs?

• Over 1.2 million emergency department visits involved nonmedical use of pharmaceuticals in 2011

• 16.7 million individuals aged 12 or older had used prescription drugs for a nonmedical purpose in 2012
Illicit Drug Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2011

- Marijuana: 4,165
- Pain Relievers: 1,768
- Cocaine: 821
- Heroin: 426
- Tranquilizers: 400
- Hallucinogens: 342
- Stimulants: 329
- Inhalants: 141
- Sedatives: 78
Abuse of Opioids is Prevalent

- 35 million people in the United States have used Rx opioids non-medically in their lifetime
- Immediate Release (IR) opioids are more frequently abused than Extended Release (ER) opioids

### Lifetime Abuse of Selected Pain Relievers

<table>
<thead>
<tr>
<th>Drug</th>
<th>Number in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicodin®, Lortab®, or Lorcet®</td>
<td>20</td>
</tr>
<tr>
<td>Darvocet®, Darvon®, or Tylenol® with Codeine</td>
<td>15</td>
</tr>
<tr>
<td>Percocet®, Percodan®, or Tylox®</td>
<td>10</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>5</td>
</tr>
<tr>
<td>Codeine</td>
<td>5</td>
</tr>
<tr>
<td>OxyContin®</td>
<td>3</td>
</tr>
<tr>
<td>Morphine</td>
<td>2</td>
</tr>
<tr>
<td>Demerol®</td>
<td>1</td>
</tr>
<tr>
<td>Methadone</td>
<td>1</td>
</tr>
<tr>
<td>Ultram®</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: SAMHSA, Office of Applied Studies, 2009 National Survey on Drug Use and Health
Why Do We Need PDMPs?

• Nearly all prescription drugs involved in overdoses are originally prescribed by a physician.

• The costs stemming from the nonmedical use of prescription opioids have been estimated at over $50 billion annually.
PDMP Data Sharing

• As of 2012
  – 28 states sharing data with Medicaid or Medicare
  – 8 states sharing data with workers’ comp programs
  – Only Michigan is known to have provided data to private health insurers

• Given the potential of such sharing to improve monitoring by third party payers, there is ample opportunity to expand their access to PDMP data
Interstate Interoperability

• State PDMPs vary with respect to whether or how information is shared with other states
  – As of December 2013, 45 states allowed for sharing PDMP information on some level

• An effort is ongoing to facilitate information sharing using prescription monitoring information exchange (PMIX) architecture
The PMIX program is intended to enable the interstate exchange of PDMP information.

A state can participate in the PMIX program if it has:
- legislation allowing it to share patient information with other states in real time,
- identified at least one other state as a partner in the information exchange, and
- either (1) established an MOU with their identified partner(s) in the information exchange or (2) ratified the Prescription Monitoring Interstate Compact.

PMIX allows for hubs to exist at the state and national levels, and it allows for hub-to-hub information exchange.
The National Association of Boards of Pharmacy (NABP) has developed a technology platform to facilitate interstate sharing of PDMP data, called InterConnect

– As of January 2014, nearly half of the states were engaged in interstate data sharing
Federal Legislation

• Although there are no federal requirements for state PDMP interoperability and information sharing, Congress passed legislation that
  – authorized the HHS Secretary to “facilitate ... the development of recommendations on interoperability standards” for interstate information exchange by states receiving specified federal grants to support their PDMPs
  – required the HHS Secretary, in so doing, to consider the PMIX standards
  – required the HHS Secretary to submit “a report on enhancing the interoperability of [state PDMPs] with other technologies and databases used for detecting and reducing fraud, diversion, and abuse of prescription drugs”
Potential Unintended Consequences

- Prescribers may hesitate to prescribe medications monitored by the PDMP if they are concerned about potentially coming under scrutiny from law enforcement or licensing authorities.
- Patients may fear coming under scrutiny from law enforcement if they use medications monitored by the PDMP.
- Patients may also have concerns about the privacy and security of their prescription information if it is submitted to a PDMP.
Potential Unintended Consequences

• PDMPs may push drug diversion activities over the border into a neighboring state with no PDMP

• PDMP activity may cause an uptick in the abuse of non-prescription opioids such as heroin
Are PDMPs Effective?

Effectiveness depends to a large extent on whether prescription data are

– Completely and accurately collected
– Analyzed appropriately
– Made available in a proactive and timely manner
Are PDMPs Effective?

• A 2006 federally funded study found that PDMPs change prescriber behavior in a way that reduces the per capita supply of prescription pain relievers and stimulants

• A study published in 2012 found that while opioid abuse was increasing over time, the rate of increase was slower in states with PDMPs than in states without PDMPs
Limitations of the Research

• Research regarding PDMP effectiveness is limited, at least in part, by the difficulties inherent in conducting such research.

• Challenges in conducting high-quality research on PDMP effectiveness include:
  – defining effectiveness
  – accounting for differences among PDMPs
  – considering potential confounding factors
A survey of prescribers found that the most common reasons given for not using a PDMP were:
- the time required to access it (73%)
- difficult navigation of the web portal (29%)
- forgetting the password (28%)
More than a third of survey respondents (39%) felt that accessing PDMP information would not change their practice for that patient.
Relatively small numbers of respondents reported that lack of computer availability (9%) or never having applied for access (11%) were barriers to using a PDMP.
PDMP Effectiveness

• PDMP data can help inform sound clinical decision-making to ensure prescriptions are medically necessary, reducing illicit use of controlled substances
  – A study of medical providers in Ohio emergency departments found that 41% of those given PDMP data altered their prescribing for patients receiving multiple simultaneous narcotics prescriptions
    • Of these providers, 61% prescribed no narcotics or fewer narcotics than originally planned, while 39% prescribed more
  – Another study found that consulting the PDMP increased physicians’ confidence that the controlled substances they prescribed were medically warranted
Washington PDMP

• Recently implemented PDMP data sharing with its Medicaid and workers’ compensation programs

• Using individual PDMP queries, State workers’ compensation program found claimants
  – were receiving opioid prescriptions from out-of-network providers
  – had been prescribed high doses of opioids in the three months prior to an injury

• Identification of such individuals can lead to appropriate intervention, help ensure safer prescribing, and bring significant savings to third party payers
• Oklahoma PDMP is conducting an ongoing survey of prescribers
• Preliminary findings suggest PDMP utilization has an impact on clinical decision-making
  – 63% of respondents report that PDMP data has helped them identify patients who were abusing prescription medications
  – 64% said data helped identify patients who were doctor shopping.
  – 71% reported changing the type of controlled substance or refusing to prescribe a controlled substance as a result of viewing PDMP data
• A 2010 survey of users of Kentucky’s PDMP, found that PDMP reports aided clinical practice
  – 70% of respondents judging them “very” or “somewhat” important in helping them decide what drug to prescribe a patient
  – 90% of prescribers and pharmacists responding to the survey “refused to prescribe or dispense a controlled substance based on the information contained in the PDMP report
Wyoming PDMP

- State PDMP analysis indicates that as prescribers and pharmacists received unsolicited PDMP reports concerning likely doctor shoppers, the number of likely doctor shoppers in the PDMP database declined markedly.

- PDMP reports prompt prescribers and pharmacists to reduce the availability of controlled substances to patients engaged in doctor shopping.
  - Reduction in addiction, abuse, and costs related to prescriptions.
• After the inception of the Florida PDMP
  – Doctor shopping declined 35% during FY 2012 for individuals visiting five or more prescribers and five or more pharmacies within 90 days
  – PDMP logged over 2.3 million queries to its database by prescribers and pharmacists
• The decline in doctor shopping has contributed to a drop in drug-related deaths in the state
  – Deaths attributable to oxycodone overdose in 2011 fell by 18% and overall drug deaths fell by 6.3%
Nevada PDMP

• Inception of unsolicited reporting in 1997
  – 36% decline in the mean number of prescribers who prescribed to those identified as probable doctor shoppers between 1997 and 2002
  – 25% decline in the mean number of pharmacies that dispensed to probable doctor shoppers

• Analysis of unsolicited reports sent indicates that mean number of dosage units of controlled substances dispensed declined on average 41% in the year following the reports
• Data from the Virginia PDMP show that in the period following a rapid increase in PDMP data utilization, the number of individuals meeting criteria for doctor shopping dropped by 44%
Value of PDMPs for Third Party Payers

• PDMP data can
  – Provide a more complete picture of what controlled substances an insured individual might be obtaining, using, or diverting from legitimate use
  – Identify which providers have prescribed and dispensed to these individuals
  – Help third party payers identify unnecessary and illegal prescribing and dispensing
  – Help third party payers identify poor medical practice and fraudulent claims
PDMP data on providers can help

- Identify outliers in comparison to peers using summary statistics
- Qualify providers when setting up a network
- Monitor ongoing prescriber behavior
- Identify pill mills and systematic fraud via utilization reviews
- Back up or inform a pharmacist’s decision to dispense or deny a prescription
- Review providers to determine if they want to continue/initiate a preferred provider contract
