Prescription Drug Abuse Prevention Learning Circle
Session 3

Monday, March 5, 2012
1:30 to 2:30 p.m. Eastern Standard Time

Featured Speaker:
John Eadie

Moderators:
Cindy Rodgers, Erica Streit-Kaplan

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Protecting Children’s Safety: How Prescription Monitoring Programs Can Assist

Children’s Safety Network
Webinar
March 5, 2012
Presented by John L Eadie
Director, PMP Center of Excellence
What do PMPs do?
Prescription Monitoring Program

GOALS

• Education & Information
• Public Health Initiatives
• Early Intervention & Prevention
• Investigation & Enforcement
PMPs Collect Data on Controlled Substances Rx

• Controlled Substances are in 5 Schedules
• Schedule I – illegal, addictive drugs like heroin, PCP, and LSD
• Schedule II – Medical purpose but high risk for abuse:
  • Pain Killers like oxycodone or morphine,
  • Stimulants like Ritalin or amphetamines,
  • Sedatives like Seconal
• Schedule III – High risk but somewhat lower:
  • Pain Killers like Vicodin or Lortabs (Hydrocodone)
• Schedule IV – Lower risk for abuse:
  • Benzodiazepines like Xanax, Valium, and Librium
• Schedule V – Lowest risk but still a risk:
  • Cough syrups with codeine
Collect Data from Pharmacies

• PMPs Collect Controlled Substances:
  22 collect Schedules II - V
  15 collect Schedules II – IV
  2 collect Schedule II only
  1 collect Schedules II & III

• Some Collect Non-Controlled Substances
  6 collect tramadol (Ultram®)

• Electronic Data Collection - Batch Reporting
• Reporting Frequency varies - 7 to 30 days
System Overview

Dispensers

Pharmacists

Reports Sent

Prescribers

Law Enforcement & Professional Licensing Agencies

*Other groups may also receive reports other than those listed
Prescription Information Collected

- Patient identification:
  - Name & Address
  - DOB & Gender
- Prescriber Information
- Dispensing Pharmacy Information
- Drug Information, e.g.
  - NDC # = name, type, strength, manufacturer
- Quantity & date dispensed
PMP Data

- Is Provided to:
  - Doctors and other prescribers
  - Pharmacies
  - Health Professional Licensing Boards
  - Law Enforcement
  - Medical Examiners
  - Medicaid State Agencies

- Data helps identify:
  - Patients who need care and are not abusing medicine
  - Doctor Shoppers
  - Other forms of drug abuse and diversion
Number of Prescription Drug Monitoring Programs (PMPs) Between 1939 and 2011

Number of PDMPs

Years


49 PMPs
Status of Prescription Drug Monitoring Programs (PDMPs)

Operational PDMPs
Enacted PDMP legislation, but program not yet operational
Pending legislation

Research is current as of February 1, 2012
State Agencies Administering PMPs

• Consumer Protection Agency
• Departments of Health
• Departments of Law and of Public Safety
• Substance Abuse Single State Agencies
• Boards of Pharmacy
• Cabinet of Children and Families
• Narcotic and Dangerous Drug Agency
• Professional Licensing Agency
Number of PDMP Reports Produced Per Year

- 2001: 500,000
- 2002: 1,000,000
- 2003: 1,500,000
- 2004: 2,000,000
- 2005: 2,500,000
- 2006 Est.: 3,000,000
- 2007 Est.: 3,500,000
- 2008: 4,000,000

Harold Rogers Program Started
Prescription Drug Abuse Epidemic: The Risk to Children

- Use of prescription controlled substances among youth
- First Time nonmedical use of prescription drugs
- Doctor Shopping – large quantities of prescription drugs
- Drug Overdoses
- Newborns in Withdrawal – women of child bearing age giving birth to babies in withdrawal
What Can PMPs Tell Us About Use of Controlled Substances by Youth?

Preliminary examination of data to demonstrate the types of analyses that are possible.
Charleston County, SC

South Carolina PMP and its vendor, HID, provided:

- Opioid prescriptions, Schedule II and III
- Dispensed by SC Pharmacies in 2010
- By county of patients’ residences

We examined:

- City of Charleston and surrounding communities - a metropolitan county
- Use of Opioids by youth compared to all ages
Opiate Utilization in Charleston County, SC
(1/1/10 -- 12/31/10)

- Qnty Dispensed (in %)
- # of Recipients (in %)
Charleston County, SC

- Opioid prescriptions only - in Schedules II and III
- Users by age group
  - How many of us were aware that a community could have almost as many individuals aged 20 - 29 receiving opioid prescriptions as those aged 50 – 59, even if their use of prescriptions is less?
  - Spartanburg County has a similar pattern
- Future Analyses
  - Is this an emerging pattern?
  - How prevalent is this in the rest of the county?
  - What are the implications for abuse and misuse; i.e. is the use of opioids by youth for legitimate medical care?
The State of Maine

Maine PMP provided:
• Schedules II, III and IV prescriptions
• Dispensed by Maine Pharmacies in 2009
• Data for the entire state

We examined:
• Use of prescriptions by youth age 25 and under,
• Comparison of junior high, senior high, and post high school age groups
  • to one another
  • and to the rest of all age users, by percentages
Maine Prescription Monitoring Program FY2010 Data
Drug Categories of Dispensed Schedules II-IV Drugs by Age Group
N=434,317

Percentage of Persons in Category

Age Groups
Use of Controlled Substances by Youth in Maine

Caveat:

• Time did not permit a data rerun using rates per population
• This needs to be done, particularly as the number of years in each age group varied
Use of Controlled Substances by Youth in Maine

Preliminary observations and questions from the data:

• After high school, youth appear to have obtained more opioid prescriptions compared to younger ages.
• Is this related to employment and the ability to pay for the prescriptions through commercial insurance?

Related questions:

• Is this related to increases in injuries, disease, other sources of pain?
• Is this related to leaving parental supervision?
What Do We Know About: Prescription Drug Abuse by Youth?
From some non-PMP Sources

- First Time Nonmedical Use of Drugs
- Dependence on Pain Reliever
- Sources of Prescription Drugs for Nonmedical Use
First time illicit users in 1998

- **Tranquilizers:**
  - 31% were 12 – 17 years old (258,000).
  - 32% were 18 – 25 years old (264,000).

- **Pain Relievers:**
  - 45% were 12 – 17 years old (718,000).
  - 31% were 18 – 25 years old (491,000).
Past Year Initiates for Specific Illicit Drugs
Among Persons Aged 12 or Older – NSDUH, 2009

<table>
<thead>
<tr>
<th>Drug</th>
<th>Numbers in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>2.4</td>
</tr>
<tr>
<td>Pain Tranquil</td>
<td>2.2</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>1.2</td>
</tr>
<tr>
<td>Inhalants</td>
<td>1.1</td>
</tr>
<tr>
<td>Stimulants</td>
<td>.81</td>
</tr>
<tr>
<td>Cocaine</td>
<td>.70</td>
</tr>
<tr>
<td>LSD Sedatives</td>
<td>.34</td>
</tr>
<tr>
<td>Heroin</td>
<td>.19</td>
</tr>
<tr>
<td>PCP</td>
<td>.04</td>
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</tbody>
</table>
Pain Reliever Dependence -- 2002 to 2010

Persons with dependence increased: from 936,000 to 1.4 million.
• Most of these were aged 26 or older (56.6 percent),
• But about one third (463,000) were aged 18 to 25.

Persons receiving specialty substance use treatment more than doubled: from 199,000 to 406,000.
• In 2010, 65.7 percent were aged 26 or older,
• 25.9 percent were aged 18 to 25.

Persons meeting DMS-IV Criteria for Dependence or Abuse
Source: NSDUH Report for 2010
Sources of Prescription Drugs for Abuse by Youth

• Common Understanding:
  • Dominant source is from a friend or relative
    • Given for free
    • Purchased from them
    • Stolen from them
  • Prescriptions to youth are only a minor source

• Questions:
  • Does this hold true for all youth?
  • Does this hold true in all locales?
  • Will this hold true in the future, or is it changing?
Source of Abused Rx Drugs – By Age:

Source: Washington University School of Medicine, 2006
What Can PMPs Tell Us About Prescription Drug Abuse by Youth?

Preliminary examination of data to demonstrate the kinds of analyses that are possible.
Wyoming

Wyoming PMP provided:

- Data for 296 persons who exceeded WY PMP’s high threshold for Doctor Shoppers – state population 544,000
- Generally, one month’s data for each person, i.e. the month they exceeded threshold; unsolicited reports were sent to prescribers
- Schedule II through V plus Carisoprodol and Ultram
- Dispensed by WY Pharmacies - Statewide

We examined:

- Doctor shoppers by 10 year age groupings
- Use of Opioids by youth compared to all ages
Individuals Identified as Doctor Shoppers in WY PMP Database, Associated Prescriptions and Non-liquid Doses, by Age Grouping
Wyoming Doctor Shoppers

Observations:

• The WY doctor shoppers are younger than general population who obtain prescriptions
  • more than 60% of the doctor shoppers are age 39 and under
  • This is unlike general use in Charleston, SC data – highest group 50 to 59

• The quantities of prescriptions and dosage units obtained by younger doctor shoppers is similar to older doctor shoppers
  • General use in Charleston County, SC - use differed by age group, peaking at age 50 to 59
  • Among WY doctor shoppers, the 29 and under ages obtained the same level of prescriptions and dosage units as did older doctor shoppers.
Wyoming Doctor Shoppers

Observation:

• Those 25 and under are 12.2% of the total WY doctor shoppers.
  • At about 8 Rx and 300 dosage units per month for each of these young doctor shoppers, what quantities of prescription drugs could they divert into abuse if WY were not monitoring and sending out unsolicited reports upon their exceeding the threshold?
  • Given the relatively high thresholds used in WY, what additional young doctor shopping may be underway?

Question for further analysis:

• Is youthful doctor shopping increasing, at least in some areas of the country, compared to previous understandings?
Additional Areas for Analysis
Age-specific rates of ED visits for nonmedical use of opioid analgesics (OAs) and benzodiazepines (BZDs) — United States, 2004 and 2008 – MMWR June 18,
Drug Overdose among Youth – PMP’s Roles

- Should Emergency Departments routinely request PMP data when treating overdose victims to determine what drugs were obtained prior to overdose?
- Should prescribers and pharmacies be notified when persons to whom they prescribed overdose on the prescribed drugs?
- Should researchers examine PMP records for overdose victims to determine the extent to which prescribed drugs were involved?
Florida Newborns in Withdrawal

Source: Herald Tribune, Sarasota Florida, July 18, 2010
Data Attributed to Florida Dept. of Health

ICD code 779.5 Drug withdrawal in newborn (drug is not specified)
## Washington State Newborns in Withdrawal

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Rate of Newborns in Withdrawal per 1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.4</td>
</tr>
<tr>
<td>2009</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Source: Washington State Department of Health

ICD code 779.5 Drug withdrawal in newborn (drug is not specified)
CONCLUSION: Consistent with some previous investigations, our study shows an association between early pregnancy maternal opioid analgesic treatment and certain birth defects. This information should be considered by women and their physicians who are making treatment decisions during pregnancy.
Increases in Newborn Withdrawal and Maternal Use of Opioids - Risk of Birth Defects

• To what extent do these issues reflect use and abuse of prescription drugs by youth of child bearing age?
• Should Ob/Gyn physicians request PMP reports to determine
  • Patients in pain treatment with opioids who don’t advise their Ob/Gyn?
  • Patients who are doctor shopping and refuse to disclose this?
• Should pediatricians obtain PMP reports, i.e. should they continue to perceive prescription abuse as only for adults?
• Should researchers examine maternal PMP records when newborns are born in withdrawal / babies are born with defects to determine if prescribed drugs were involved?
Geospatial Mapping

- Work by MA PMP and the PMP Center of Excellence display the value of Geospatial Mapping of PMP and related data.
- This has importance for substance abuse prevention, intervention and treatment.
- Mapping regarding prescriptions obtained by youth, in general, and by youthful doctor shoppers holds similar promise.
Rates of Doctor Shopping Associated with OxyContin in MA, 1996

"Source: Massachusetts Dept. of Public Health in partnership with Brandeis University"
Rates of Doctor Shopping Associated with OxyContin in MA, 1998

"Source: Massachusetts Dept. of Public Health in partnership with Brandeis University"
2005 Prescriptions Associated with Questionable Activity (Rates per 100,000 Prescriptions) by Pharmacy Town

Questionable activity rates
- 0
- 1 - 1095
- 1096 - 1897
- 1898 - 2882
- 2883 - 14184

"Source: Massachusetts Dept. of Public Health in partnership with Brandeis University"
2005 Opioid-related Overdose
Rate per 100,000 by Town

Rate per 100,000 Quintiles
- 0
- 0.01 - 19.82
- 19.82 - 37.5
- 37.5 - 56.92
- 56.92 - 225.51

"Source: Massachusetts Dept. of Public Health in partnership with Brandeis University"
Other Lines of Inquiry for PMP Data

- Is youthful doctor shopping limited to a few states or is it more widespread?
- Is it increasing?
- To what extent does doctor shopping provide drugs for youth to abuse?
- Which drugs are involved in youthful doctor shopping; are they the same as for adults or the same in all areas?
- To what extent are youth obtaining drug “Cocktails” from prescribers, i.e.:
  - Opioids (e.g. Schedule II Oxycodone or Schedule III Hydrocodone)
  - Benzodiazepines (e.g. Schedule IV Alprazolam)
  - Muscle Relaxant (Unscheduled Carisoprodol/Soma – 13 PMPs collect)
How Can PMPs Help Prevent and Intervene in Abuse of Prescription Drugs by Youth?

• Analyze data to identify problem areas
  • Advise communities where prevention is needed.
  • Help target intervention
  • Focus limited resources on areas at highest risk

• Provide data to prescribers & pharmacies to assure that they know the prescription history of each child/youth before prescribing or dispensing.
How Can State and Local Agencies Work with PMPs?

- Contact each state’s PMP and request data.
  - PMP Center of Excellence can assist.

- Distribute and use analyzed PMP data:
  - Advise communities where prevention is needed.
  - Help target interventions
  - Focus limited resources on areas at highest risk

- Persuade prescribers and pharmacists to use PMP data to avoid mis-prescribing to children/youth.

- Coordinate with medical facilities, health agencies, law enforcement, professional licensing agencies to assure they focus on the risk to children and youth.
How Can Children’s Safety Network Help - Nationally?

• Work with PMP Center of Excellence to:
  • Develop analyses and new lines of inquiry
  • Seek funding to expand research
  • Develop concepts for research and evaluation using the new Prescription Behavior Surveillance System.

• Educate all Child Safety Network stakeholders re the importance of using PMP data to assist their work.

• Work with Alliance of States with Prescription Monitoring Programs to establish contacts between states’ CSN and PMPs.
The Prescription Monitoring Program Center of Excellence at Brandeis University
The PMP Center of Excellence - Helping Prescription Monitoring Programs Fight Drug Abuse

The drug-abuse epidemic: Non-medical use of prescription drugs is now the nation's second leading cause of accidental death. Recent trends and data.

The response: State prescription drug monitoring programs (PMPs) are effectively curbing prescription drug diversion and abuse. How can they have even greater impact? Learn how the Center of Excellence is helping PMPs address the problem. Read our mission statement.

Kentucky Congressman Hal Rogers: Florida’s Pill Mills, Deaths, Demonstrate Need for Prescription Monitoring

Congressman Hal Rogers' letter to Governor Rick Scott asking him not to discontinue Florida's PMP makes a powerful case for prescription monitoring.

Read the letter and related news stories.
2.1 Prescription Monitoring Programs: An Effective Tool in Curbing the Prescription Drug Abuse Epidemic

February 2011
PMP Center of Excellence Expert Panel

- 5 PMP Representatives
- Alliance of States with PMPs
- ATTC
- AATOD
- BJA
- CDC
- Carnevale Associates
- Coalition Against Ins. Fraud
- DEA
- FDA
- Health Insurance Carrier
- IJIS Institute
- NASCSA
- National CAPT
- NMPI
- ONDCP
- SAMHSA
- Tufts Medical School
- Veterans Administration
Contact Information

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Our Next Session

Wednesday, April 18, 1:00 – 2:30 p.m. ET

Working Together to Prevent Prescription Drug Abuse Among Youth

Surgeon General Dr. Regina Benjamin, invited